



THE DATASHEET OF 70CRU04PBF



FEATURED PRODUCTS

- Bridge Rectifiers
- Fast Recovery Rectifiers
- Schottky Rectifiers
- Standard Rectifiers
- Ultrafast Recovery Rectifiers

RESOURCES

- For technical support, contact Rectifiers@vishay.com
- For more information, contact DiodesAmericas@vishay.com, DiodesEurope@vishay.com, and DiodesAsia@vishay.com

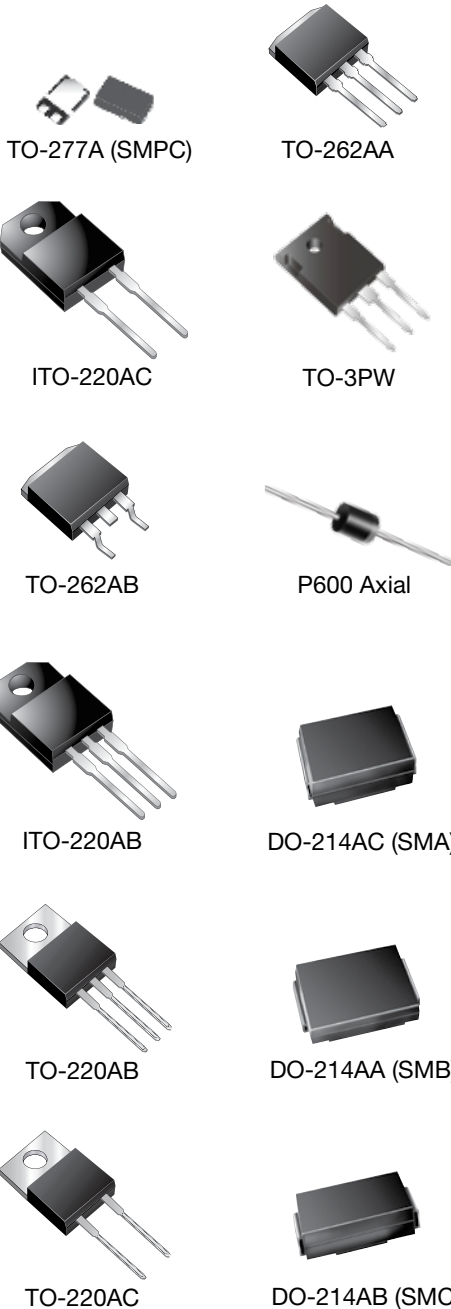




TABLE OF CONTENTS

Featured Product Introduction	03
Schottky Rectifiers	07
• TMBS® (Trench MOS Barrier Schottky) Rectifiers	12
• High Performance Schottky Rectifiers	19
– HPS GEN 5.0 (HPS GEN 5.0 $T_j = 175\text{ }^{\circ}\text{C}$ – Submicron Trench Technology).....	19
– HPS GEN 3.x (Planar Technology)	20
– HPS GEN 2.x (Planar Technology)	21
Ultrafast Recovery Rectifiers.....	32
• FRED Pt® (Fast Recovery Epitaxial Diodes).....	36
• HEXFRED®.....	44
• Ultrafast Avalanche Rated Sinterglass Diodes.....	47
Standard and Fast Recovery Rectifiers.....	49
• Standard Rectifiers	49
• Standard Avalanche Rated Sinterglass Diodes.....	51
• High-Voltage Standard Recovery Diodes – Plastics.....	52
• ESD Capability Rectifiers.....	54
• Fast Recovery Rectifiers.....	55
• Fast Soft Recovery Rectifiers	57
• Fast Avalanche Rated Sinterglass Diodes.....	60
Bridge Rectifiers.....	62
Rectifier Packages.....	67
Sample Package Construction.....	68

Industry's First Commercial TMBS® - Trench MOS Barrier Schottky Rectifier Series



Vishay's patented Trench MOS Barrier Schottky (TMBS®) rectifiers are available with seven voltage ratings from 45 V to 200 V and several different package options to serve a wide range of system requirements. TMBS offers several advantages over planar Schottky rectifiers. As operating voltage moves to 45 V and above, planar Schottky rectifiers tend to lose their advantage of fast switching speeds and low forward voltage drop to a substantial degree. The patented TMBS structure addresses this issue by diminishing minority carrier injections to the drift region, thus minimizing stored charges and improving switching speeds.

For detailed information, please refer to the TMBS section of this selector guide or visit the Vishay website for the latest information on available devices.

FEATURES

- Patented Trench structure
- Voltage ratings: 45 V, 60 V, 80 V, 100 V, 120 V, 150 V, 200 V
- Improved efficiency in AC/DC SMPS and DC/DC converters
- High power density and low forward voltage
- Multiple package options

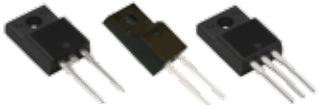
APPLICATIONS

- Adaptors for LCD monitors and TVs, mini PCs
- PC and server power supplies
- AD/DC SMPS
- DC/DC converters
- Telecom and server OR-ing diodes
- Solar Cell junction box as a bypass diode for protection

FRED Pt® Series 200 V to 600 V, T_j max 175 °C: Flexible Ultrafast Platform for Power Supplies and Inverters


SMA / SMB / SMC

DPAK (TO-252)
(rated 4 A to 15 A)

TO-220AC / TO-220AB / Isolated TO-220AC
(rated 8 A to 30 A)

TO-220FPAC / AB
(rated 8 A to 30 A)

D²PAK (TO-263)
(rated 8 A to 30 A)

I²PAK (TO-262)
(rated 8 A to 30 A)

TO-247AC
(rated 30 A to 60 A)

PowerTab®
(rated 80 A to 150 A)

The Vishay Semiconductors FRED Pt® Gen 1 and Gen 2 series of ultrafast diodes offers designers a highly flexible solution that's equally at home in consumer and automotive applications.

With ratings from 200 V to 600 V and from 3 A to 150 A -- unique in the industry -- this series allows designers to increase the efficiency of power supplies with devices designed to minimize conduction and/or switching losses.

Their extreme low leakage current at high temperature, careful design of chip terminations, and construction with high-quality materials make FRED Pt the ideal choice for automotive applications as well.

FEATURES

- V_{RRM} 200 V to 600 V
- Same current (A) rating is available for devices optimized for lowest conduction losses or lowest switching losses
 - Lowest Q_{rr} at 125 °C
 - Lowest V_F at I_F
- Improved efficiency in SMPS
- Soft recovery for reduced EMI at high di/dt
- T_j (max) 175 °C
- AEC-Q101 qualified
- Material categorization: For definitions of compliance please see www.vishay.com/doc?99912
- Lead (Pb)-containing terminations are not RoHS-compliant. Exemptions may apply.

APPLICATIONS

- Power factor correction (PFC) for switchmode power supplies in
 - Desktop PCs
 - Lighting/ballast
 - Servers and telecom
 - PDP, TVs, LCD, monitors
 - Game controllers
- ECU for fuel injection on diesel/gasoline-fueled systems
- Traction control systems
- Solar inverters
- Freewheeling diode for industrial applications

eSMP® Flat Type Surface-Mount Packages with Space-Saving Footprint

The Vishay Semiconductors eSMP® flat type surface-mount packages enables higher current density and power efficiency with a unique design that promotes better thermal performance and reliability.

SMP


(3.8 mm x 2 mm x 1 mm)

SMPC


(6.7 mm x 4.8 mm x 1.1 mm)

MicroSMP


(2.5 mm x 1.3 mm x 0.65 mm)

SYMMETRICAL FLAT TYPES

SMF


(3.7 mm x 1.8 mm x 0.98 mm)

SlimSMA


(5.2 mm x 2.6 mm x 0.95 mm)

	R_{θJM}
MicroSMP	30 °C/W
SMP	15 °C/W
SMPC	3 °C/W
SMF	25 °C/W
SlimSMA	12 °C/W

FEATURES

- Space saving miniature packages:
 - SMP (3.8 mm x 2 mm x 1 mm)
 - SMPC (6.7 mm x 4.8 mm x 1.1 mm)
 - MicroSMP (2.5 mm x 1.3 mm x 0.65 mm)
 - SMF (3.7 mm x 1.8 mm x 0.98 mm)
 - » Symmetrical leads
 - Wave and reflow solderable
 - SlimSMA (5.2 mm x 2.6 mm x 0.95 mm)
 - » Symmetrical leads
- Special wide bottom plate design enables better heat dissipation than other packages of similar sizes
- Low device height
- Low thermal resistance
- AEC-Q101 qualified
- Halogen-free versions available
- Available for Schottky, ultrafast, and standard rectifiers

APPLICATIONS

- Telecom
- Automotive
- Computer
- Industrial
- Lighting
- DC/DC converters
- Free wheeling
- Mobile consumer electronics
- Solar Cell junction box as a bypass diode for protection

New isoCink+™ Series Enhanced Power Bridge Rectifiers 10 A to 25 A (BU series) and 30 A to 45 A (PB series)



Vishay's new isoCink+™ power bridge rectifier series gives designers a space saving, high-current solution for bridge rectifiers in switchmode power supplies (SMPS), home appliances, audio/video equipment, and more. With highly efficient performance comparable to larger size bridge products, the low thermal resistance of power bridge devices reduces size requirements for heat sinks, since less heat needs to be dissipated. Offering a lead pitch and pin layout compatible with the conventional GBU and GSIB-55, isoCink+™ offers the designers the ability to upgrade system power without changing PCB layouts or heat sinking. A maximum solder temperature of 275 °C/10 s enables high reliability in manual soldering.

APPLICATIONS INCLUDE

- Primary rectification circuit of switch mode power supplies and adaptors for desktop PCs, servers, notebook PCs, plasma display panel (PDP) TVs, LCD TVs, and monitors
- Primary rectification circuit of inverter type home appliance as in refrigerator, washing machine, air conditioner and induction heater systems
- Primary rectification circuit in telecom SMPS

Part Number	Description	Package	V _F at I _F Per Chip, T _J
BU2506 to BU2510	600 V to 1000 V 25 A single-phase bridge rectifier	BU	0.87 V typical at 12.5 A, 125 °C
BU2006 to BU2010	600 V to 1000 V 20 A single-phase bridge rectifier	BU	0.85 V typical at 10 A, 125 °C
BU1506 to BU1510	600 V to 1000 V 15 A single-phase bridge rectifier	BU	0.87 V typical at 7.5 A, 125 °C
BU1206 to BU1210	600 V to 1000 V 12 A single-phase bridge rectifier	BU	0.88 V typical at 6 A, 125 °C
BU1006 to BU1010	600 V to 1000 V 10 A single-phase bridge rectifier	BU	0.88 V typical at 5 A, 125 °C
PB3006 to PB3010	600 V to 1000 V 30 A single-phase bridge rectifier	PB	0.97 V typical at 15 A, +125 °C
PB3506 to PB3510	600 V to 1000 V 35 A single-phase bridge rectifier	PB	0.90 V typical at 17.5 A, +125 °C
PB4006 to PB4010	600 V to 1000 V 40 A single-phase bridge rectifier	PB	0.94 V typical at 20 A, +125 °C
PB5006 to PB5010	600 V to 1000 V 45 A single-phase bridge rectifier	PB	0.90 V typical at 22.5 A, +125 °C



RECTIFIERS

Schottky Rectifiers



Schottky Rectifiers are the ideal product for high-speed and low power loss applications. Their metal-silicon junctions and majority carrier condition result in extremely fast recovery times (less than 10 ns) and very low forward voltage drops. Vishay's unique sputtered metallization process and ion implanted guarding technology result in a highly reliable Schottky product. We offer our customers the opportunity to select the best device for their applications by providing the flexibility of different barrier heights.

$I_{F(AV)}$ (A)	Device ⁽¹⁾	Package		$V_{(BR)}$ Range (V)	Max V_F at I_F	
		Family ⁽³⁾	Type		(V)	(A)
0.6	SB020 to SB060	Plastic Axial	MPG06	20 to 60	0.55 / 0.70	0.6
1.0	1N5817 to 1N5819	Plastic Axial	DO-204AL (DO-41)	20 to 40	0.45 to 0.60	1.0
1.0	BYM13-20 to BYM13-60	Plastic SMD	DO-213AB (MELF)	20 to 60	0.50 to 0.70	1.0
1.0	MSS1P2L and MSS1P3L	Plastic SMD	MicroSMP	20 to 30	0.50	1.0
1.0	MSS1P3 and MSS1P4	Plastic SMD	MicroSMP	30 to 40	0.55	1.0
1.0	MSS1P5 and MSS1P6	Plastic SMD	MicroSMP	50 to 60	0.68	1.0
1.0	SB120 to SB160	Plastic Axial	DO-204AL (DO-41)	20 to 60	0.48 to 0.65	1.0
1.0	SB1H90 and SB1H100	Plastic Axial	DO-204AL (DO-41)	90 to 100	0.77	1.0
1.0	SGL41-20 to SGL41-60	Plastic SMD	DO-213AB (MELF)	20 to 60	0.50 to 0.70	1.0
1.0	SS12 to SS16	Plastic SMD	DO-214AC (SMA)	20 to 60	0.50 to 0.75	1.0
1.0	B120 to B160	Plastic SMD	DO-214AC (SMA)	20 to 60	0.52 to 0.75	1.0
1.0	SS1H9 and SS1H10	Plastic SMD	DO-214AC (SMA)	90 to 100	0.77	1.0
1.0	SS1P3L and SS1P4L	Plastic SMD	DO-220AA (SMP)	30 to 40	0.45 to 0.48	1.0
1.0	SS1P3 and SS1P4	Plastic SMD	DO-220AA (SMP)	30 to 40	0.50 to 0.53	1.0
1.0	SS1P5L and SS1P6L	Plastic SMD	DO-220AA (SMP)	50 to 60	0.59	1.0
1.1	SL02	Plastic SMD	DO-219AB	20	0.42	1.0
1.1	SL03	Plastic SMD	DO-219AB	30	0.45	1.0
1.1	SL04	Plastic SMD	DO-219AB	40	0.53	1.0
1.5	BYS10-25 to BYS10-45	Plastic SMD	DO-214AC (SMA)	25 to 45	0.5	1.0
1.5	BYS11-90	Plastic SMD	DO-214AC (SMA)	90	0.75	1.0
1.5	BYS12-90	Plastic SMD	DO-214AC (SMA)	90	0.36 / 0.75	0.015 / 1.0
1.5	SL12 and SL13	Plastic SMD	DO-214AC (SMA)	20 to 30	0.36 / 0.445	0.1 / 1.0
1.5	SS29 and SS210	Plastic SMD	DO-214AA(SMB)	90 to 100	0.75/0.95	1.0/3.0
2.0	SB220 to SB260	Plastic Axial	DO-204AC (DO-15)	20 to 60	0.5 / 0.68	2.0
2.0	SB220S to SB260S	Plastic Axial	DO-204AL (DO-41)	20 to 60	0.55 / 0.70	2.0
2.0	SB2H90 and SB2H100	Plastic Axial	DO-204AC (DO-15)	90 to 100	0.79	2.0
2.0	MSS2P2 and MSS2P3	Plastic SMD	MicroSMP	20 to 30	0.6	2.0
2.0	B230LA and B240A	Plastic SMD	DO-214AC (SMA)	30 to 40	0.50 to 0.55	2.0
2.0	SL22 and SL23	Plastic SMD	DO-214AA (SMB)	20 to 30	0.395 / 0.44	1.0 / 2.0
2.0	SS22 to SS26	Plastic SMD	DO-214AA (SMB)	20 to 60	0.50 to 0.70	2.0
2.0	SS22S, SS23S and SS24S	Plastic SMD	DO-214AC (SMA)	20 to 40	0.55	2.0
2.0	SS25S and SS26S	Plastic SMD	DO-214AC (SMA)	50 to 60	0.75	2.0
2.0	SS2H9 and SS2H10	Plastic SMD	DO-214AA (SMB)	90 to 100	0.79	2.0
2.0	SS2P2, SS2P3 and SS2P4	Plastic SMD	DO-220AA (SMP)	20 to 40	0.55	2.0
2.0	SS2P2L and SS2P3L	Plastic SMD	DO-220AA (SMP)	20 to 30	0.5	2.0
2.0	SS2P5 and SS2P6	Plastic SMD	DO-220AA (SMP)	50 to 60	0.7	2.0

Note:

1. Bold text indicates new product
2. Dual center-tapped device (V_F limit at I_F is per diode)

3. All Schottky die are planar with oxide passivation
4. 35 V to 45 V product/50 V to 60 V product



RECTIFIERS

Schottky Rectifiers



Schottky Rectifiers, continued

$I_{F(AV)}$ (A)	Device ⁽¹⁾	Package		$V_{(BR)}$ Range (V)	Max V_F at I_F	
		Family ⁽³⁾	Type		(V)	(A)
2.0	SS2PH9 and SS2PH10	Plastic SMD	DO-220AA (SMP)	90 to 100	0.8	2.0
2.0	SSA23L and SSA24	Plastic SMD	DO-214AC (SMA)	30 to 40	0.45 to 0.49	2.0
3.0	B330LA and B340A	Plastic SMD	DO-214AC (SMA)	30 to 40	0.50 to 0.55	3.0
3.0	B340LB	Plastic SMD	DO-214AA (SMB)	40	0.45	3.0
3.0	B350A and B360A	Plastic SMD	DO-214AC (SMA)	50 to 60	0.72	3.0
3.0	B350B and B360B	Plastic SMD	DO-214AA (SMB)	50 to 60	0.66	3.0
3.0	1N5820 to 1N5822	Plastic Axial	DO-201AD	20 to 40	0.475 to 0.525	3.0
3.0	SB320 to SB360	Plastic Axial	DO-201AD	20 to 60	0.49 to 0.68	3.0
3.0	SB320S to SB360S	Plastic Axial	DO-204AC (DO-15)	20 to 60	0.50 to 0.70	3.0
3.0	SB3H90 and SB3H100	Plastic Axial	DO-201AD	90 to 100	0.8	3.0
3.0	SS32 to SS36	Plastic SMD	DO-214AB (SMC)	20 to 60	0.5 to 0.75	3.0
3.0	SS3H9 and SS3H10	Plastic SMD	DO-214AB (SMC)	90 to 100	0.8	3.0
3.0	SS3P3	Plastic SMD	DO-220AA (SMP)	30	0.58	3.0
3.0	SS3P4	Plastic SMD	DO-220AA (SMP)	40	0.6	3.0
3.0	SS3P5 and SS3P6	Plastic SMD	DO-220AA (SMP)	50 to 60	0.78	3.0
3.0	SSA33L and SSA34	Plastic SMD	DO-214AC (SMA)	30 to 40	0.45 to 0.49	3.0
3.0	SS3P3L and SS3P4L	Plastic SMD	TO-277A (SMPC)	30 to 40	0.47	3.0
3.0	SS3P5L and SS3P6L	Plastic SMD	TO-277A (SMPC)	50 to 60	0.60	3.0
4.0	SL42 and SL43	Plastic SMD	DO-214AB (SMC)	20 to 30	0.42 / 0.47	4.0 / 8.0
4.0	SL44	Plastic SMD	DO-214AB (SMC)	40	0.44 / 0.50	4.0 / 8.0
4.0	SSB43L and SSB44	Plastic SMD	DO-214AA (SMB)	30 to 40	0.45 to 0.49	4.0
5.0	SB520 to SB560	Plastic Axial	DO-201AD	20 to 60	0.48 to 0.65	5.0
5.0	SB520A to SB560A	Plastic Axial	DO-201AD	20 to 60	0.50 to 0.70	5.0
5.0	SB5H90 and SB5H100	Plastic Axial	DO-201AD	90 to 100	0.8	5.0
5.0	SSC53L and SSC54	Plastic SMD	DO-214AB (SMC)	30 to 40	0.45 to 0.49	5.0
5.0	SS5P3 and SS5P4	Plastic SMD	TO-277A (SMPC)	30 to 40	0.52	5.0
5.0	SS5P5 and SS5P6	Plastic SMD	TO-277A (SMPC)	50 to 60	0.69	5.0
5.0	SS5P9 and SS5P10	Plastic SMD	TO-277A (SMPC)	90 to 100	0.88	5.0
6.0	SS6P4C	Plastic SMD ⁽²⁾	TO-277A (SMPC)	40	0.65	3.0
7.5	MBR735 to MBR760	Plastic Power Pack	TO-220AC	35 to 60	0.84 / 0.75 ⁽⁴⁾	15.0 / 7.5
7.5	MBRB735 to MBRB760	Power Pack SMD	TO-263AB (D ² PAK)	35 to 60	0.84 / 0.75 ⁽⁴⁾	15.0 / 7.5
7.5	MBRF735 to MBRF760	Isolated Power Pack	ITO-220AC	35 to 60	0.84 / 0.75 ⁽⁴⁾	15.0 / 7.5
7.5	MBR7H35 to MBR7H60	Plastic Power Pack	TO-220AC	35 to 60	0.63 / 0.73 ⁽⁴⁾	7.5
7.5	MBRB7H35 to MBRB7H60	Power Pack SMD	TO-263AB (D ² PAK)	35 to 60	0.63 / 0.73 ⁽⁴⁾	7.5
7.5	MBRF7H35 to MBRF7H60	Isolated Power Pack	ITO-220AC	35 to 60	0.63 / 0.73 ⁽⁴⁾	7.5
8.0	SBL8L40	Plastic Power Pack	TO-220AC	40	0.44/0.50	4.0/8.0
8.0	SS8P2L and SS8P3L	Plastic SMD	TO-277A (SMPC)	20 to 30	0.57	8.0
8.0	SS8PH9 and SS8PH10	Plastic SMD	TO-277A (SMPC)	90 to 100	0.9	8.0
8.0	SS8P2CL and SS8P3CL	Plastic SMD ⁽²⁾	TO-277A (SMPC)	20 to 30	0.54	4.0
8.0	SS8P3C and SS8P4C	Plastic SMD ⁽²⁾	TO-277A (SMPC)	30 to 40	0.58	4.0

Note:

1. Bold text indicates new product
2. Dual center-tapped device (V_F limit at I_F is per diode)

3. All Schottky die are planar with oxide passivation
4. 35 V to 45 V product/50 V to 60 V product



RECTIFIERS

Schottky Rectifiers



Schottky Rectifiers, continued

$I_{F(AV)}$ (A)	Device ⁽¹⁾	Package		$V_{(BR)}$ Range (V)	Max V_F at I_F	
		Family ⁽³⁾	Type		(V)	(A)
8.0	SS8P5C and SS8P6C	Plastic SMD ⁽²⁾	TO-277A (SMPC)	50 to 60	0.70	4.0
10.0	MBR1035 to MBR1060	Plastic Power Pack	TO-220AC	35 to 60	0.84 / 0.80 ⁽⁴⁾	20.0 / 10.0
10.0	MBRB1035 to MBRB1060	Power Pack SMD	TO-263AB (D ² PAK)	35 to 60	0.84 / 0.80 ⁽⁴⁾	20.0 / 10.0
10.0	MBRF1035 to MBRF1060	Isolated Power Pack	ITO-220AC	35 to 60	0.84 / 0.80 ⁽⁴⁾	20.0 / 10.0
10.0	MBR10H35 to MBR10H60	Plastic Power Pack	TO-220AC	35 to 60	0.63 / 0.71 ⁽⁴⁾	10.0
10.0	MBRB10H35 to MBRB10H60	Power Pack SMD	TO-263AB (D ² PAK)	35 to 60	0.63 / 0.71 ⁽⁴⁾	10.0
10.0	MBRF10H35 to MBRF10H60	Isolated Power Pack	ITO-220AC	35 to 60	0.63 / 0.71 ⁽⁴⁾	10.0
10.0	MBR10H90 and MBR10H100	Plastic Power Pack	TO-220AC	90 to 100	0.77	10.0
10.0	MBRB10H90 and MBRB10H100	Power Pack SMD	TO-263AB (D ² PAK)	90 to 100	0.77	10.0
10.0	MBRF10H90 and MBRF10H100	Isolated Power Pack	ITO-220AC	90 to 100	0.77	10.0
10.0	MBR10H90CT and MBR10H100CT	Plastic Power Pack ⁽²⁾	TO-220AB	90 to 100	0.76	5.0
10.0	MBRB10H90CT and MBRB10H100CT	Power Pack SMD ⁽²⁾	TO-263AB (D ² PAK)	90 to 100	0.76	5.0
10.0	MBRF10H90CT and MBRF10H100CT	Isolated Power Pack ⁽²⁾	ITO-220AB	90 to 100	0.76	5.0
10.0	MBR10H150CT	Plastic Power Pack ⁽²⁾	TO-220AB	150	0.88	5.0
10.0	SB10H150CT-1	Plastic Power Pack ⁽²⁾	TO-262AA	150	0.88	5.0
10.0	MBRF10H150CT	Isolated Power Pack ⁽²⁾	ITO-220AB	150	0.88	5.0
10.0	SBL1030 and SBL1040	Plastic Power Pack	TO-220AC	30 to 40	0.6	10.0
10.0	SBLB1030 and SBLB1040	Power Pack SMD	TO-263AB (D ² PAK)	30 to 40	0.6	10.0
10.0	SBLF1030 and SBLF1040	Isolated Power Pack	ITO-220AC	30 to 40	0.6	10.0
10.0	SBL1030CT and SBL1040CT	Plastic Power Pack ⁽²⁾	TO-220AB	30 to 40	0.55	5.0
10.0	SBLB1030CT and SBLB1040CT	Power Pack SMD ⁽²⁾	TO-263AB (D ² PAK)	30 to 40	0.55	5.0
10.0	SBLF1030CT and SBLF1040CT	Isolated Power Pack ⁽²⁾	ITO-220AB	30 to 40	0.55	5.0
10.0	SBL10L25	Plastic Power Pack	TO-220AC	25	0.46	10.0
10.0	SBLB10L25	Power Pack SMD	TO-263AB (D ² PAK)	25	0.46	10.0
10.0	SBLF10L25	Isolated Power Pack	ITO-220AC	25	0.46	10.0
10.0	SBL10L30	Plastic Power Pack	TO-220AC	30	0.52	10.0
10.0	SBLB10L30	Power Pack SMD	TO-263AB (D ² PAK)	30	0.52	10.0
10.0	SBLF10L30	Isolated Power Pack	ITO-220AC	30	0.52	10.0
10.0	SS10P2CL and SS10P3CL	Plastic SMD	TO-277A (SMPC)	20 to 30	0.52	5.0
10.0	SS10P3C and SS10P4C	Plastic SMD	TO-277A (SMPC)	30 to 40	0.53	5.0
10.0	SS10P3 and SS10P4	Plastic SMD	TO-277A (SMPC)	30 to 40	0.56	10.0
10.0	SS10P5 and SS10P6	Plastic SMD	TO-277A (SMPC)	50 to 60	0.67	10.0
10.0	SS10PH45	Plastic SMD	TO-277A (SMPC)	45	0.72	10.0
10.0	SS10PH9 and SS10PH10	Plastic SMD	TO-277A (SMPC)	90 to 100	0.88	10.0
12.0	SS12P2L and SS12P3L	Plastic SMD	TO-277A (SMPC)	20 to 30	0.56	12.0
12.0	SS12P4C	Plastic SMD	TO-277A (SMPC)	40	0.52	6.0
12.0	SS12P4S	Plastic SMD	TO-277A (SMPC)	40	0.60	12.0
15.0	SB15H45	Plastic Axial	P600	45	0.64	15.0
15.0	MBR1535CT to MBR1560CT	Plastic Power Pack ⁽²⁾	TO-220AB	35 to 60	0.84 / 0.75 ⁽⁴⁾	15.0 / 7.5
15.0	MBRB1535CT to MBRB1560CT	Power Pack SMD ⁽²⁾	TO-263AB (D ² PAK)	35 to 60	0.84 / 0.75 ⁽⁴⁾	15.0 / 7.5

Note:

1. Bold text indicates new product
2. Dual center-tapped device (V_F limit at I_F is per diode)

3. All Schottky die are planar with oxide passivation
4. 35 V to 45 V product/50 V to 60 V product



RECTIFIERS

Schottky Rectifiers



Schottky Rectifiers, continued

$I_{F(AV)}$ (A)	Device ⁽¹⁾	Package		$V_{(BR)}$ Range (V)	Max V_F at I_F	
		Family ⁽³⁾	Type		(V)	(A)
15.0	MBRF1535CT to MBRF1560CT	Isolated Power Pack ⁽²⁾	ITO-220AB	35 to 60	0.84 / 0.75 ⁽⁴⁾	15.0 / 7.5
15.0	MBR15H35CT to MBR15H60CT	Plastic Power Pack ⁽²⁾	TO-220AB	35 to 60	0.63 / 0.73 ⁽⁴⁾	7.5
15.0	MBRB15H35CT to MBRB15H60CT	Power Pack SMD ⁽²⁾	TO-263AB (D ² PAK)	35 to 60	0.63 / 0.73 ⁽⁴⁾	7.5
15.0	MBRF15H35CT to MBRF15H60CT	Isolated Power Pack ⁽²⁾	ITO-220AB	35 to 60	0.63 / 0.73 ⁽⁴⁾	7.5
15.0	SS15P3S	Plastic SMD	TO-277A (SMPC)	30	0.57	15.0
16.0	MBR1635 to MBR1660	Plastic Power Pack	TO-220AC	35 to 60	0.63 / 0.75 ⁽⁴⁾	16.0
16.0	MBRB1635 to MBRB1660	Power Pack SMD	TO-263AB (D ² PAK)	35 to 60	0.63 / 0.75 ⁽⁴⁾	16.0
16.0	MBRF1635 to MBRF1660	Isolated Power Pack	ITO-220AC	35 to 60	0.63 / 0.75 ⁽⁴⁾	16.0
16.0	MBR16H35 to MBR16H60	Plastic Power Pack	TO-220AC	35 to 60	0.66 / 0.73 ⁽⁴⁾	16.0
16.0	MBRB16H35 to MBRB16H60	Power Pack SMD	TO-263AB (D ² PAK)	35 to 60	0.66 / 0.73 ⁽⁴⁾	16.0
16.0	MBRF16H35 to MBRF16H60	Isolated Power Pack	ITO-220AC	35 to 60	0.66 / 0.73 ⁽⁴⁾	16.0
16.0	SBL1630CT and SBL1640CT	Plastic Power Pack ⁽²⁾	TO-220AB	30 to 40	0.55	8.0
16.0	SBLB1630CT and SBLB1640CT	Power Pack SMD ⁽²⁾	TO-263AB (D ² PAK)	30 to 40	0.55	8.0
16.0	SBLF1630CT and SBLF1640CT	Isolated Power Pack ⁽²⁾	ITO-220AB	30 to 40	0.55	8.0
20.0	MBR2035CT to MBR2060CT	Plastic Power Pack ⁽²⁾	TO-220AB	35 to 60	0.65 / 0.80 ⁽⁴⁾	10.0
20.0	MBRB2035CT to MBRB2060CT	Power Pack SMD ⁽²⁾	TO-263AB (D ² PAK)	35 to 60	0.65 / 0.80 ⁽⁴⁾	10.0
20.0	MBRF2035CT to MBRF2060CT	Isolated Power Pack ⁽²⁾	ITO-220AB	35 to 60	0.65 / 0.80 ⁽⁴⁾	10.0
20.0	MBR20H35CT to MBR20H60CT	Plastic Power Pack ⁽²⁾	TO-220AB	35 to 60	0.63 / 0.71 ⁽⁴⁾	10.0
20.0	MBRB20H35CT to MBRB20H60CT	Power Pack SMD ⁽²⁾	TO-263AB (D ² PAK)	35 to 60	0.63 / 0.71 ⁽⁴⁾	10.0
20.0	MBRF20H35CT to MBRF20H60CT	Isolated Power Pack ⁽²⁾	ITO-220AB	35 to 60	0.63 / 0.71 ⁽⁴⁾	10.0
20.0	MBR20H90CT and MBR20H100CT	Plastic Power Pack ⁽²⁾	TO-220AB	90 to 100	0.77	10.0
20.0	MBRB20H90CT and MBRB20H100CT	Power Pack SMD ⁽²⁾	TO-263AB (D ² PAK)	90 to 100	0.77	10.0
20.0	MBRF20H90CT and MBRF20H100CT	Isolated Power Pack ⁽²⁾	ITO-220AB	90 to 100	0.77	10.0
20.0	MBR20H90CTG and MBR20H100CTG	Plastic Power Pack ⁽²⁾	TO-220AB	90 to 100	0.85	10.0
20.0	MBR20H150CT	Plastic Power Pack ⁽²⁾	TO-220AB	150	0.9	10.0
20.0	SB20H150CT-1	Plastic Power Pack ⁽²⁾	TO-262AA	150	0.9	10.0
20.0	MBRF20H150CT	Isolated Power Pack ⁽²⁾	ITO-220AB	150	0.9	10.0
20.0	MBR20H200CT	Plastic Power Pack ⁽²⁾	TO-220AB	200	0.88	10.0
20.0	SB20H200CT-1	Power Pack SMD ⁽²⁾	TO-262AA	200	0.88	10.0
20.0	MBRF20H200CT	Isolated Power Pack ⁽²⁾	ITO-220AB	200	0.88	10.0
20.0	M2035S and M2045S	Plastic Power Pack	TO-220AB	35 to 45	0.7	20.0
20.0	MI2050C to MI2060C	Plastic Power Pack ⁽²⁾	TO-262AA	50 to 60	0.74	10.0
20.0	SBL2030CT and SBL2040CT	Plastic Power Pack ⁽²⁾	TO-220AB	30 to 40	0.6	10.0
20.0	SBLB2030CT and SBLB2040CT	Power Pack SMD ⁽²⁾	TO-263AB (D ² PAK)	30 to 40	0.6	10.0
20.0	SBLF2030CT and SBLF2040CT	Isolated Power Pack ⁽²⁾	ITO-220AB	30 to 40	0.6	10.0
20.0	SBL2030PT and SBL2040PT	Plastic Power Pack ⁽²⁾	TO-247AD (TO-3P)	30 to 40	0.55	10.0
25.0	SBL25L20CT to SBL25L30CT	Plastic Power Pack ⁽²⁾	TO-220AB	20 to 30	0.49	12.5
25.0	SBLB25L20CT to SBLB25L30CT	Power Pack SMD ⁽²⁾	TO-263AB (D ² PAK)	20 to 30	0.49	12.5
25.0	SBLF25L20CT to SBLF25L30CT	Isolated Power Pack ⁽²⁾	ITO-220AB	20 to 30	0.49	12.5
30.0	MBR2535CT to MBR2560CT	Plastic Power Pack ⁽²⁾	TO-220AB	35 to 60	0.82 / 0.75 ⁽⁴⁾	30.0 / 15.0

Note:

1. Bold text indicates new product
2. Dual center-tapped device (V_F limit at I_F is per diode)

3. All Schottky die are planar with oxide passivation
4. 35 V to 45 V product/50 V to 60 V product

Schottky Rectifiers, continued

$I_{F(AV)}$ (A)	Device ⁽¹⁾	Package		$V_{(BR)}$ Range (V)	Max V_F at I_F	
		Family ⁽³⁾	Type		(V)	(A)
30.0	MBRB2535CT to MBRB2560CT	Power Pack SMD ⁽²⁾	TO-263AB (D ² PAK)	35 to 60	0.82 / 0.75 ⁽⁴⁾	30.0 / 15.0
30.0	MBRF2535CT to MBRF2560CT	Isolated Power Pack ⁽²⁾	ITO-220AB	35 to 60	0.82 / 0.75 ⁽⁴⁾	30.0 / 15.0
30.0	MBR25H35CT to MBR25H60CT	Plastic Power Pack ⁽²⁾	TO-220AB	35 to 60	0.64 / 0.70 ⁽⁴⁾	15.0
30.0	MBRB25H35CT to MBRB25H60CT	Power Pack SMD ⁽²⁾	TO-263AB (D ² PAK)	35 to 60	0.64 / 0.70 ⁽⁴⁾	15.0
30.0	MBRF25H35CT to MBRF25H60CT	Isolated Power Pack ⁽²⁾	ITO-220AB	35 to 60	0.64 / 0.70 ⁽⁴⁾	15.0
30.0	MBR3035CT and MBR3045CT	Plastic Power Pack ⁽²⁾	TO-220AB	35 to 45	0.76	30.0
30.0	MBRB3035CT and MBRB3045CT	Power Pack SMD ⁽²⁾	TO-263AB (D ² PAK)	35 to 45	0.76	30.0
30.0	MBRF3035CT and MBRF3045CT	Isolated Power Pack ⁽²⁾	ITO-220AB	35 to 45	0.76	30.0
30.0	MBR30H35CT to MBR30H60CT	Plastic Power Pack ⁽²⁾	TO-220AB	35 to 60	0.62 / 0.68 ⁽⁴⁾	15.0
30.0	MBRB30H35CT to MBRB30H60CT	Power Pack SMD ⁽²⁾	TO-263AB (D ² PAK)	35 to 60	0.62 / 0.68 ⁽⁴⁾	15.0
30.0	MBRF30H35CT to MBRF30H60CT	Isolated Power Pack ⁽²⁾	ITO-220AB	35 to 60	0.62 / 0.68 ⁽⁴⁾	15.0
30.0	MBR3035PT to MBR3060PT	Plastic Power Pack ⁽²⁾	TO-247AD (TO-3P)	35 to 60	0.76 / 0.75 ⁽⁴⁾	30.0 / 20.0
30.0	MBR30H35PT to MBR30H60PT	Plastic Power Pack ⁽²⁾	TO-247AD (TO-3P)	35 to 60	0.66 / 0.74 ⁽⁴⁾	20.0
30.0	MBR30H90CT and MBR30H100CT	Plastic Power Pack ⁽²⁾	TO-220AB	90 to 100	0.82	15.0
30.0	MBRF30H90CT and MBRF30H100CT	Isolated Power Pack ⁽²⁾	ITO-220AB	90 to 100	0.82	15.0
30.0	MBRB30H90CT and MBRB30H100CT	Power Pack SMD ⁽²⁾	TO-263AB (D ² PAK)	90 to 100	0.82	15.0
30.0	MBR30H90PT and MBR30H100PT	Plastic Power Pack ⁽²⁾	TO-247AD (TO-3P)	90 to 100	0.82	15.0
30.0	MBR30H150CT	Plastic Power Pack ⁽²⁾	TO-220AB	150	0.90	15.0
30.0	SB30H150CT-1	Plastic Power Pack ⁽²⁾	TO-262AA	150	0.90	15.0
30.0	MBRF30H150CT	Isolated Power Pack ⁽²⁾	ITO-220AB	150	0.90	15.0
30.0	M3035S and M3045S	Plastic Power Pack	TO-220AB	35 to 45	0.70	30.0
30.0	MB3035S and MB3045S	Power Pack SMD	TO-263AB (D ² PAK)	35 to 45	0.70	30.0
30.0	MI3035S and MI3045S	Plastic Power Pack	TO-262AA	35 to 45	0.70	30.0
30.0	M3060C	Plastic Power Pack ⁽²⁾	TO-220AB	60	0.72	15.0
30.0	MI3060C	Plastic Power Pack ⁽²⁾	TO-262AA	60	0.72	15.0
30.0	MF3060C	Isolated Power Pack ⁽²⁾	ITO-220AB	60	0.72	15.0
30.0	M30L40C	Plastic Power Pack ⁽²⁾	TO-220AB	40	0.55	15.0
30.0	M30L45C	Plastic Power Pack ⁽²⁾	TO-220AB	45	0.60	15.0
30.0	SBL3030PT and SBL3040PT	Plastic Power Pack ⁽²⁾	TO-247AD (TO-3P)	30 to 40	0.55	15.0
30.0	SD241P	Plastic Power Pack ⁽²⁾	TO-247AD (TO-3P)	45	0.47 / 0.60	10.0 / 20.0 (125 °C)
40.0	MBR4035PT to MBR4060PT	Plastic Power Pack ⁽²⁾	TO-247AD (TO-3P)	35 to 60	0.70 / 0.72 ⁽⁴⁾	20.0
40.0	MBR40H35CT to MBR40H60CT	Plastic Power Pack ⁽²⁾	TO-220AB	35 to 60	0.64 / 0.68 ⁽⁴⁾	20.0
40.0	MBR40H35PT to MBR40H60PT	Plastic Power Pack ⁽²⁾	TO-247AD (TO-3P)	35 to 60	0.63 / 0.69 ⁽⁴⁾	20.0
40.0	SBL4030PT to SBL4040PT	Plastic Power Pack ⁽²⁾	TO-247AD (TO-3P)	30 to 40	0.58	20.0
60.0	MBR60100CT	Plastic Power Pack ⁽²⁾	TO-220AB	100	0.82 / 1.0	30.0 / 60.0
60.0	M6035C to M6060C	Plastic Power Pack ⁽²⁾	TO-220AB	35 to 60	0.61/0.65 ⁽⁴⁾	30.0
60.0	M6035P to M6060P	Plastic Power Pack ⁽²⁾	TO-247AD (TO-3P)	35 to 60	0.60 / 0.64 ⁽⁴⁾	30.0

Note:

1. Bold text indicates new product
2. Dual center-tapped device (V_F limit at I_F is per diode)

3. All Schottky die are planar with oxide passivation
4. 35 V to 45 V product/50 V to 60 V product



RECTIFIERS

Schottky Rectifiers



TMBS® (Trench MOS Barrier Schottky) Rectifiers

I _{F(AV)} (A)	Device ⁽¹⁾	Package		V _(BR) Range (V)	Max V _F at I _F	
		Family ⁽³⁾	Type		(V)	(A)
2	VSB220S	Plastic Axial	DO-204AL (DO-41)	200	1.23	2.0
2	VSSA210	Plastic SMD	DO-214AC (SMA)	100	0.70	2.0
3	V3P6	Plastic SMD	DO-220AA (SMP)	60	0.63	3.0
2	VSB3200S	Plastic Axial	DO-204AC (DO-15)	200	1.40	3.0
2	VSB3200	Plastic Axial	DO-201AD	200	1.20	3.0
3	VSSA310S	Plastic SMD	DO-214AC (SMA)	100	0.80	3.0
3	VSSB310	Plastic SMD	DO-214AA(SMB)	100	0.7	3.0
3	VSSA36S	Plastic SMD	DO-214AC (SMA)	60	0.63	3.0
3	VSSA3L6S	Plastic SMD	DO-214AC (SMA)	60	0.58	3.0
3	VSSB3L6S	Plastic SMD	DO-214AA(SMB)	60	0.59	3.0
4	VSSB410S	Plastic SMD	DO-214AA(SMB)	100	0.77	4.0
4	VSSB420S	Plastic SMD	DO-214AA(SMB)	200	1.9	4.0
5	VT5200	Plastic Power Pack	T0-220AC	200	1.60	5.0
5	VSSC520S	Plastic SMD	DO-214AB(SMC)	200	1.7	5.0
5	VFT5200	Isolated Power Pack	ITO-220AC	200	1.60	5.0
5	VBT5200	Power Pack SMD	T0-263AB (D ² PAK)	200	1.60	5.0
5	VIT5200	Plastic Power Pack	T0-262AA	200	1.60	5.0
7	VT760	Plastic Power Pack	T0-220AC	60	0.80	7.5
7	VFT760	Isolated Power Pack	ITO-220AC	60	0.80	7.5
7	VBT760	Power Pack SMD	T0-263AB (D ² PAK)	60	0.80	7.5
7	VIT760	Plastic Power Pack	T0-262AA	60	0.80	7.5
8	V8P10	Plastic SMD	T0-277A (SMPC)	100	0.68	8.0
8	V8P12	Plastic SMD	T0-277A (SMPC)	120	0.84	8.0
8	V8P20	Plastic SMD	T0-277A (SMPC)	200	1.40	8.0
10	V10P10	Plastic SMD	T0-277A (SMPC)	100	0.68	10
10	V10P12	Plastic SMD	T0-277A (SMPC)	120	0.82	10
10	V10P20	Plastic SMD	T0-277A (SMPC)	200	1.34	10
10	V10P45	Plastic SMD	T0-277A (SMPC)	45	0.57	10
10	V10P45S	Plastic SMD	T0-277A (SMPC)	45	0.57	10
10	V10PL45	Plastic SMD	T0-277A (SMPC)	45	0.52	10
10	MBR1090 and MBR10100	Plastic Power Pack	T0-220AC	90 - 100	0.80	10
	MBRF1090 and MBRF10100	Isolated Power Pack	ITO-220AC	90 - 100	0.80	10
	MBRB1090 and MBRB10100	Power Pack SMD	T0-263AB (D ² PAK)	90 - 100	0.80	10
10	MBR1090CT and MBR10100CT	Plastic Power Pack ⁽²⁾	T0-220AB	90 - 100	0.85	5.0
10	MBRF1090CT and MBRF10100CT	Isolated Power Pack ⁽²⁾	ITO-220AB	90 - 100	0.85	5.0
10	VT1060C	Plastic Power Pack ⁽²⁾	T0-220AB	60	0.70	5.0
	VFT1060C	Isolated Power Pack ⁽²⁾	ITO-220AB	60	0.70	5.0
	VBT1060C	Power Pack SMD ⁽²⁾	T0-263AB (D ² PAK)	60	0.70	5.0
	VIT1060C	Plastic Power Pack ⁽²⁾	T0-262AA	60	0.70	5.0

Note:

1. Bold text indicates new product
2. Dual center-tapped device (V_F limit at I_F is per diode)



RECTIFIERS

Schottky Rectifiers



TMBS®, continued

$I_{F(AV)}$ (A)	Device ⁽¹⁾	Package		$V_{(BR)}$ Range (V)	Max V_F at I_F	
		Family ⁽³⁾	Type		(V)	(A)
10	VT1080C	Plastic Power Pack ⁽²⁾	TO-220AB	80	0.72	5.0
	VFT1080C	Isolated Power Pack ⁽²⁾	ITO-220AB	80	0.72	5.0
	VBT1080C	Power Pack SMD ⁽²⁾	TO-263AB (D ² PAK)	80	0.72	5.0
	VIT1080C	Plastic Power Pack ⁽²⁾	TO-262AA	80	0.72	5.0
10	VT1080S	Plastic Power Pack	TO-220AB	80	0.81	10
	VFT1080S	Isolated Power Pack	ITO-220AB	80	0.81	10
	VBT1080S	Power Pack SMD	TO-263AB (D ² PAK)	80	0.81	10
	VIT1080S	Plastic Power Pack	TO-262AA	80	0.81	10
10	V10150C	Plastic Power Pack ⁽²⁾	TO-220AB	150	1.41	5
	VFT10150C	Isolated Power Pack ⁽²⁾	ITO-220AB	150	1.41	5
	VBT10150C	Power Pack SMD ⁽²⁾	TO-263AB (D ² PAK)	150	1.41	5
	VIT10150C	Plastic Power Pack ⁽²⁾	TO-262AA	150	1.41	5
10	V10150S	Plastic Power Pack	TO-220AB	150	1.2	10
	VFT10150S	Isolated Power Pack	ITO-220AB	150	1.2	10
	VBT10150S	Power Pack SMD	TO-263AB (D ² PAK)	150	1.2	10
	VIT10150S	Plastic Power Pack	TO-262AA	150	1.2	10
10	VT10200C	Plastic Power Pack ⁽²⁾	TO-220AB	200	1.60	5.0
	VFT10200C	Isolated Power Pack ⁽²⁾	ITO-220AB	200	1.60	5.0
	VBT10200C	Power Pack SMD ⁽²⁾	TO-263AB (D ² PAK)	200	1.60	5.0
	VIT10200C	Plastic Power Pack ⁽²⁾	TO-262AA	200	1.60	5.0
10	VT1045C	Plastic Power Pack ⁽²⁾	TO-220AB	45	0.58	5.0
	VFT1045C	Isolated Power Pack ⁽²⁾	ITO-220AB	45	0.58	5.0
	VBT1045C	Power Pack SMD ⁽²⁾	TO-263AB (D ² PAK)	45	0.58	5.0
	VIT1045C	Plastic Power Pack ⁽²⁾	TO-262AA	45	0.58	5.0
10	VT1045CBP	Plastic Power Pack ⁽²⁾	TO-220AB	45	0.58	5.0
	VFT1045CBP	Isolated Power Pack ⁽²⁾	ITO-220AB	45	0.58	5.0
	VBT1045CBP	Power Pack SMD ⁽²⁾	TO-263AB (D ² PAK)	45	0.58	5.0
10	VT1045BP	Plastic Power Pack ⁽²⁾	TO-220AC	45	0.68	10
	VFT1045BP	Isolated Power Pack ⁽²⁾	ITO-220AC	45	0.68	10
	VBT1045BP	Power Pack SMD ⁽²⁾	TO-263AB (D ² PAK)	45	0.68	10
12	V12P10	Plastic SMD	TO-277A (SMPC)	100	0.70	12
	V12P12	Plastic SMD	TO-277A (SMPC)	120	0.80	12
15	V15P45	Plastic SMD	TO-277A (SMPC)	45	0.58	15
15	V15P45S	Plastic SMD	TO-277A (SMPC)	45	0.58	15
15	VSB1545	Plastic Axial	P600	45	0.59	15
15	VSB15L45	Plastic Axial	P600	45	0.57	15
20	MBR2090CT and MBR20100CT	Plastic Power Pack ⁽²⁾	TO-220AB	100	0.80	10
	MBRF2090CT and MBRF20100CT	Isolated Power Pack ⁽²⁾	ITO-220AB	100	0.80	10
	MBRB2090CT and MBRB20100CT	Power Pack SMD ⁽²⁾	TO-263AB (D ² PAK)	100	0.80	10

Note:

1. Bold text indicates new product
2. Dual center-tapped device (V_F limit at I_F is per diode)



RECTIFIERS

Schottky Rectifiers



TMBS®, continued

$I_{F(AV)}$ (A)	Device ⁽¹⁾	Package		$V_{(BR)}$ Range (V)	Max V_F at I_F	
		Family ⁽³⁾	Type		(V)	(A)
20	VSB2045	Plastic Axial	P600	45	0.58	20
20	VSB20L45	Plastic Axial	P600	45	0.56	20
20	VT2045C	Plastic Power Pack ⁽²⁾	TO-220AB	45	0.58	10
	VFT2045C	Isolated Power Pack ⁽²⁾	ITO-220AB	45	0.58	10
	VBT2045C	Power Pack SMD ⁽²⁾	TO-263AB (D ² PAK)	45	0.58	10
	VIT2045C	Plastic Power Pack ⁽²⁾	TO-262AA	45	0.58	10
20	VT2045CBP	Plastic Power Pack ⁽²⁾	TO-220AB	45	0.58	10
	VFT2045CBP	Isolated Power Pack ⁽²⁾	ITO-220AB	45	0.58	10
	VBT2045CBP	Power Pack SMD ⁽²⁾	TO-263AB (D ² PAK)	45	0.58	10
20	VT2045BP	Plastic Power Pack ⁽²⁾	TO-220AC	45	0.66	20
	VFT2045BP	Isolated Power Pack ⁽²⁾	ITO-220AC	45	0.66	20
	VBT2045BP	Power Pack SMD ⁽²⁾	TO-263AB (D ² PAK)	45	0.66	20
20	VT2060C	Plastic Power Pack ⁽²⁾	TO-220AB	60	0.65	10
	VFT2060C	Isolated Power Pack ⁽²⁾	ITO-220AB	60	0.65	10
	VBT2060C	Power Pack SMD ⁽²⁾	TO-263AB (D ² PAK)	60	0.65	10
	VIT2060C	Plastic Power Pack ⁽²⁾	TO-262AA	60	0.65	10
20	VT2060G	Plastic Power Pack ⁽²⁾	TO-220AB	60	0.90	10
	VFT2060G	Isolated Power Pack ⁽²⁾	ITO-220AB	60	0.90	10
	VBT2060G	Power Pack SMD ⁽²⁾	TO-263AB (D ² PAK)	60	0.90	10
	VIT2060G	Plastic Power Pack ⁽²⁾	TO-262AA	60	0.90	10
20	VT2080C	Plastic Power Pack ⁽²⁾	TO-220AB	80	0.81	10
	VFT2080C	Isolated Power Pack ⁽²⁾	ITO-220AB	80	0.81	10
	VBT2080C	Power Pack SMD ⁽²⁾	TO-263AB (D ² PAK)	80	0.81	10
	VIT2080C	Plastic Power Pack ⁽²⁾	TO-262AA	80	0.81	10
20	VT2080S	Plastic Power Pack	TO-220AB	80	0.92	20
	VFT2080S	Isolated Power Pack	ITO-220AB	80	0.92	20
	VBT2080S	Power Pack SMD	TO-263AB (D ² PAK)	80	0.92	20
	VIT2080S	Plastic Power Pack	TO-262AA	80	0.92	20
20	V20100C	Plastic Power Pack ⁽²⁾	TO-220AB	100	0.79	10
	VF20100C	Isolated Power Pack ⁽²⁾	ITO-220AB	100	0.79	10
	VB20100C	Power Pack SMD ⁽²⁾	TO-263AB (D ² PAK)	100	0.79	10
	VI20100C	Plastic Power Pack ⁽²⁾	TO-262AA	100	0.79	10
20	V20100R	Plastic Power Pack ⁽²⁾	TO-220AB	100	0.90	10
	VF20100R	Isolated Power Pack ⁽²⁾	ITO-220AB	100	0.90	10
20	V20100S	Plastic Power Pack	TO-220AB	100	0.90	20
	VB20100S	Power Pack SMD	TO-263AB (D ² PAK)	100	0.90	20
	VF20100S	Isolated Power Pack	ITO-220AB	100	0.90	20
	VI20100S	Plastic Power Pack	TO-262AA	100	0.90	20

Note:

1. Bold text indicates new product
2. Dual center-tapped device (V_F limit at I_F is per diode)



RECTIFIERS

Schottky Rectifiers



TMBS®, continued

$I_{F(AV)}$ (A)	Device ⁽¹⁾	Package		$V_{(BR)}$ Range (V)	Max V_F at I_F	
		Family ⁽³⁾	Type		(V)	(A)
20	V20100SG	Plastic Power Pack	TO-220AB	100	1.07	20
	VF20100SG	Isolated Power Pack	ITO-220AB	100	1.07	20
	VB20100SG	Plastic Power Pack	TO-263AB (D ² PAK)	100	1.07	20
	VI20100SG	Plastic Power Pack	TO-262AA	100	1.07	20
20	V20120C	Plastic Power Pack ⁽²⁾	TO-220AB	120	0.90	10
	VF20120C	Isolated Power Pack ⁽²⁾	ITO-220AB	120	0.90	10
	VB20120C	Power Pack SMD ⁽²⁾	TO-263AB (D ² PAK)	120	0.90	10
	VI20120C	Plastic Power Pack ⁽²⁾	TO-262AA	120	0.90	10
20	V20M120C	Plastic Power Pack ⁽²⁾	TO-220AB	120	0.91	10
	VF20M120C	Isolated Power Pack ⁽²⁾	ITO-220AB	120	0.91	10
	VB20M120C	Power Pack SMD ⁽²⁾	TO-263AB (D ² PAK)	120	0.91	10
	VI20M120C	Plastic Power Pack ⁽²⁾	TO-262AA	120	0.91	10
20	V20120S	Plastic Power Pack	TO-220AB	120	1.12	20
	VF20120S	Isolated Power Pack	ITO-220AB	120	1.12	20
	VB20120S	Power Pack SMD	TO-263AB (D ² PAK)	120	1.12	20
	VI20120S	Plastic Power Pack	TO-262AA	120	1.12	20
20	V20120SG	Plastic Power Pack	TO-220AB	120	1.33	20
	VF20120SG	Isolated Power Pack	ITO-220AB	120	1.33	20
	VB20120SG	Power Pack SMD	TO-263AB (D ² PAK)	120	1.33	20
	VI20120SG	Plastic Power Pack	TO-262AA	120	1.33	20
20	V20150C	Plastic Power Pack ⁽²⁾	TO-220AB	150	1.20	10
	VF20150C	Isolated Power Pack ⁽²⁾	ITO-220AB	150	1.20	10
	VB20150C	Power Pack SMD ⁽²⁾	TO-263AB (D ² PAK)	150	1.20	10
	VI20150C	Plastic Power Pack ⁽²⁾	TO-262AA	150	1.20	10
20	V20150S	Plastic Power Pack	TO-220AB	150	1.43	20
	VF20150S	Isolated Power Pack	ITO-220AB	150	1.43	20
	VB20150S	Power Pack SMD	TO-263AB (D ² PAK)	150	1.43	20
	VI20150S	Plastic Power Pack	TO-262AA	150	1.43	20
20	V20150SG	Plastic Power Pack	TO-220AB	150	1.60	20
	VF20150SG	Isolated Power Pack	ITO-220AB	150	1.60	20
	VB20150SG	Power Pack SMD	TO-263AB (D ² PAK)	150	1.60	20
	VI20150SG	Plastic Power Pack	TO-262AA	150	1.60	20
20	V20200C	Plastic Power Pack ⁽²⁾	TO-220AB	200	1.60	10
	VF20200C	Isolated Power Pack ⁽²⁾	ITO-220AB	200	1.60	10
	VB20200C	Power Pack SMD ⁽²⁾	TO-263AB (D ² PAK)	200	1.60	10
	VI20200C	Plastic Power Pack ⁽²⁾	TO-262AA	200	1.60	10
20	V20200G	Plastic Power Pack ⁽²⁾	TO-220AB	200	1.70	10
	VF20200G	Isolated Power Pack ⁽²⁾	ITO-220AB	200	1.70	10
	VB20200G	Power Pack SMD ⁽²⁾	TO-263AB (D ² PAK)	200	1.70	10
	VI20200G	Plastic Power Pack ⁽²⁾	TO-262AA	200	1.70	10

Note:

1. Bold text indicates new product
2. Dual center-tapped device (V_F limit at I_F is per diode)



RECTIFIERS

Schottky Rectifiers



TMBS®, continued

$I_{F(AV)}$ (A)	Device ⁽¹⁾	Package		$V_{(BR)}$ Range (V)	Max V_F at I_F	
		Family ⁽³⁾	Type		(V)	(A)
30	VT3045C	Plastic Power Pack ⁽²⁾	T0-220AB	45	0.57	15
	VFT3045C	Isolated Power Pack ⁽²⁾	ITO-220AB	45	0.57	15
	VBT3045C	Power Pack SMD ⁽²⁾	T0-263AB (D ² PAK)	45	0.57	15
	VIT3045C	Plastic Power Pack ⁽²⁾	T0-262AA	45	0.57	15
30	VT3045CBP	Plastic Power Pack ⁽²⁾	T0-220AB	45	0.57	15
	VFT3045CBP	Isolated Power Pack ⁽²⁾	ITO-220AB	45	0.57	15
	VBT3045CBP	Power Pack SMD ⁽²⁾	T0-263AB (D ² PAK)	45	0.57	15
30	VT3045BP	Plastic Power Pack ⁽²⁾	T0-220AC	45	0.70	30
	VFT3045BP	Isolated Power Pack ⁽²⁾	ITO-220AC	45	0.70	30
	VBT3045BP	Power Pack SMD ⁽²⁾	T0-263AB (D ² PAK)	45	0.70	30
30	VT3060C	Plastic Power Pack ⁽²⁾	T0-220AB	60	0.70	15
	VFT3060C	Isolated Power Pack ⁽²⁾	ITO-220AB	60	0.70	15
	VBT3060C	Power Pack SMD ⁽²⁾	T0-263AB (D ² PAK)	60	0.70	15
	VIT3060C	Plastic Power Pack ⁽²⁾	T0-262AA	60	0.70	15
30	VT3060G	Plastic Power Pack ⁽²⁾	T0-220AB	60	0.73	15
	VFT3060G	Isolated Power Pack ⁽²⁾	ITO-220AB	60	0.73	15
	VBT3060G	Power Pack SMD ⁽²⁾	T0-263AB (D ² PAK)	60	0.73	15
	VIT3060G	Plastic Power Pack ⁽²⁾	T0-262AA	60	0.73	15
30	VT3080C	Plastic Power Pack ⁽²⁾	T0-220AB	80	0.82	15
	VFT3080C	Isolated Power Pack ⁽²⁾	ITO-220AB	80	0.82	15
	VBT3080C	Power Pack SMD ⁽²⁾	T0-263AB (D ² PAK)	80	0.82	15
	VIT3080C	Plastic Power Pack ⁽²⁾	T0-262AA	80	0.82	15
30	VT3080S	Plastic Power Pack	T0-220AB	80	0.95	30
	VFT3080S	Isolated Power Pack	ITO-220AB	80	0.95	30
	VBT3080S	Power Pack SMD	T0-263AB (D ² PAK)	80	0.95	30
	VIT3080S	Plastic Power Pack	T0-262AA	80	0.95	30
30	V30100C	Plastic Power Pack ⁽²⁾	T0-220AB	100	0.80	15
	VF30100C	Isolated Power Pack ⁽²⁾	ITO-220AB	100	0.80	15
	VB30100C	Power Pack SMD ⁽²⁾	T0-263AB (D ² PAK)	100	0.80	15
	VI30100C	Plastic Power Pack ⁽²⁾	T0-262AA	100	0.80	15
30	V30100S	Plastic Power Pack	T0-220AB	100	0.91	30
	VF30100S	Isolated Power Pack	ITO-220AB	100	0.91	30
	VB30100S	Power Pack SMD	T0-263AB (D ² PAK)	100	0.91	30
	VI30100S	Plastic Power Pack	T0-262AA	100	0.91	30
30	V30100SG	Plastic Power Pack	T0-220AB	120	1.00	30
	VF30100SG	Isolated Power Pack	ITO-220AB	120	1.00	30
	VB30100SG	Power Pack SMD	T0-263AB (D ² PAK)	120	1.00	30
	VI30100SG	Plastic Power Pack	T0-262AA	120	1.00	30

Note:

1. Bold text indicates new product
2. Dual center-tapped device (V_F limit at I_F is per diode)



RECTIFIERS

Schottky Rectifiers



TMBS®, continued

$I_{F(AV)}$ (A)	Device ⁽¹⁾	Package		$V_{(BR)}$ Range (V)	Max V_F at I_F	
		Family ⁽³⁾	Type		(V)	(A)
30	V30120C	Plastic Power Pack ⁽²⁾	TO-220AB	120	0.97	15
	VF30120C	Isolated Power Pack ⁽²⁾	ITO-220AB	120	0.97	15
	VB30120C	Power Pack SMD ⁽²⁾	TO-263AB (D ² PAK)	120	0.97	15
	VI30120C	Plastic Power Pack ⁽²⁾	TO-262AA	120	0.97	15
30	V30M120C	Plastic Power Pack ⁽²⁾	TO-220AB	120	0.98	15
	VF30M120C	Isolated Power Pack ⁽²⁾	ITO-220AB	120	0.98	15
	VB30M120C	Power Pack SMD ⁽²⁾	TO-263AB (D ² PAK)	120	0.98	15
	VI30M120C	Plastic Power Pack ⁽²⁾	TO-262AA	120	0.98	15
30	V30120S	Plastic Power Pack	TO-220AB	120	1.10	30
	VF30120S	Isolated Power Pack	ITO-220AB	120	1.10	30
	VB30120S	Power Pack SMD	TO-263AB (D ² PAK)	120	1.10	30
	VI30120S	Plastic Power Pack	TO-262AA	120	1.10	30
30	V30120SG	Plastic Power Pack	TO-220AB	120	1.28	30
	VF30120SG	Isolated Power Pack	ITO-220AB	120	1.28	30
	VB30120SG	Power Pack SMD	TO-263AB (D ² PAK)	120	1.28	30
	VI30120SG	Plastic Power Pack	TO-262AA	120	1.28	30
30	V30150C	Plastic Power Pack ⁽²⁾	TO-220AB	150	1.36	15
	VF30150C	Isolated Power Pack ⁽²⁾	ITO-220AB	150	1.36	15
	VB30150C	Power Pack SMD ⁽²⁾	TO-263AB (D ² PAK)	150	1.36	15
	VI30150C	Plastic Power Pack ⁽²⁾	TO-262AA	150	1.36	15
30	V30200C	Plastic Power Pack ⁽²⁾	TO-220AB	200	1.10	15
	VF30200C	Isolated Power Pack ⁽²⁾	ITO-220AB	200	1.10	15
	VB30200C	Power Pack SMD ⁽²⁾	TO-263AB (D ² PAK)	200	1.10	15
	VI30200C	Plastic Power Pack ⁽²⁾	TO-262AA	200	1.10	15
30	V30100PW	Plastic Power Pack ⁽²⁾	TO-3PW	100	0.91	15
40	VT4045C	Plastic Power Pack ⁽²⁾	TO-220AB	45	0.58	20
	VFT4045C	Isolated Power Pack ⁽²⁾	ITO-220AB	45	0.58	20
	VBT4045C	Power Pack SMD ⁽²⁾	TO-263AB (D ² PAK)	45	0.58	20
	VIT4045C	Plastic Power Pack ⁽²⁾	TO-262AA	45	0.58	20
40	VT4045BP	Plastic Power Pack ⁽²⁾	TO-220AC	45	0.67	40
	VFT4045BP	Isolated Power Pack ⁽²⁾	ITO-220AC	45	0.67	40
	VBT4045BP	Power Pack SMD ⁽²⁾	TO-263AB (D ² PAK)	45	0.67	40
40	V40100C	Plastic Power Pack ⁽²⁾	TO-220AB	100	0.73	20
	VF40100C	Isolated Power Pack ⁽²⁾	ITO-220AB	100	0.73	20
	VB40100C	Power Pack SMD ⁽²⁾	TO-263AB (D ² PAK)	100	0.73	20
	VI40100C	Plastic Power Pack ⁽²⁾	TO-262AA	100	0.73	20
40	V40100G	Plastic Power Pack ⁽²⁾	TO-220AC	100	0.81	20
	VF40100G	Isolated Power Pack ⁽²⁾	ITO-220AB	100	0.81	20
	VB40100G	Power Pack SMD ⁽²⁾	TO-263AB (D ² PAK)	100	0.81	20
	VI40100G	Plastic Power Pack ⁽²⁾	TO-262AA	100	0.81	20

Note:

1. Bold text indicates new product
2. Dual center-tapped device (V_F limit at I_F is per diode)



RECTIFIERS

Schottky Rectifiers



TMBS®, continued

$I_{F(AV)}$ (A)	Device ⁽¹⁾	Package		$V_{(BR)}$ Range (V)	Max V_F at I_F	
		Family ⁽³⁾	Type		(V)	(A)
40	V40100K	Plastic Power Pack ⁽²⁾	TO-220AB	100	0.82	20
40	V40120C	Plastic Power Pack ⁽²⁾	TO-220AB	120	0.88	20
	VF40120C	Isolated Power Pack ⁽²⁾	ITO-220AB	120	0.88	20
	VB40120C	Power Pack SMD ⁽²⁾	TO-263AB (D ² PAK)	120	0.88	20
	VI40120C	Plastic Power Pack ⁽²⁾	TO-262AA	120	0.88	20
40	V40M120C	Plastic Power Pack ⁽²⁾	TO-220AB	120	0.89	20
	VF40M120C	Isolated Power Pack ⁽²⁾	ITO-220AB	120	0.89	20
	VB40M120C	Power Pack SMD ⁽²⁾	TO-263AB (D ² PAK)	120	0.89	20
	VI40M120C	Plastic Power Pack ⁽²⁾	TO-262AA	120	0.89	20
40	V40150C	Plastic Power Pack ⁽²⁾	TO-220AB	150	1.43	20
	VF40150C	Isolated Power Pack ⁽²⁾	ITO-220AB	150	1.43	20
	VB40150C	Power Pack SMD ⁽²⁾	TO-263AB (D ² PAK)	150	1.43	20
	VI40150C	Plastic Power Pack ⁽²⁾	TO-262AA	150	1.43	20
40	V40100PW	Plastic Power Pack ⁽²⁾	TO-3PW	100	0.77	20
40	V40100PGW	Plastic Power Pack ⁽²⁾	TO-3PW	100	0.85	20
50	V50100PW	Plastic Power Pack ⁽²⁾	TO-3PW	100	0.84	25
60	VT6045C	Plastic Power Pack ⁽²⁾	TO-220AB	45	0.64	30
	VFT6045C	Isolated Power Pack ⁽²⁾	ITO-220AB	45	0.64	30
	VBT6045C	Power Pack SMD ⁽²⁾	TO-263AB (D ² PAK)	45	0.64	30
	VIT6045C	Plastic Power Pack ⁽²⁾	TO-262AA	45	0.64	30
60	VT6045CBP	Plastic Power Pack ⁽²⁾	TO-220AB	45	0.64	30
	VFT6045CBP	Isolated Power Pack ⁽²⁾	ITO-220AB	45	0.64	30
	VBT6045CBP	Power Pack SMD ⁽²⁾	TO-263AB (D ² PAK)	45	0.64	30
60	V60100C	Plastic Power Pack ⁽²⁾	TO-220AB	100	0.79	30
	VB60100C	Power Pack SMD ⁽²⁾	TO-263AB (D ² PAK)	100	0.79	30
60	V60120C	Plastic Power Pack ⁽²⁾	TO-220AB	120	0.95	30
	VB60120C	Plastic Power Pack ⁽²⁾	TO-263AB (D ² PAK)	120	0.95	30
60	V60100PW	Plastic Power Pack ⁽²⁾	TO-3PW	100	0.86	30
60	V60200PGW	Plastic Power Pack ⁽²⁾	TO-3PW	200	1.48	30
80	V80100PW	Plastic Power Pack ⁽²⁾	TO-3PW	100	0.84	40

Note:

1. Bold text indicates new product
2. Dual center-tapped device (V_F limit at I_F is per diode)



RECTIFIERS

Schottky Rectifiers



The Vishay portfolio of Schottky diodes offers the industry's widest range of current and voltage ratings in a broad range of through-hole and surface-mount packages. Addressing every application area where Schottky diodes are used, these high performance devices are built by Vishay on well-established with planar technology as well as on our leading-edge submicron trench technology. Gen 5.0 trench based devices feature a maximum junction temperature of 175 °C and voltage ratings of 45 V and 100 V. Gen 2.0 and Gen 3.1 planar technology devices feature 125 °C, 150 °C, or 175 °C maximum junction temperatures and several voltage rating options from 15 V to 150 V. Both device types offer specific advantages based on the final customer application, including superior efficiency, robust avalanche capability, and the ability to withstand voltage spikes.

HPS GEN 5.0 (Submicron Trench Technology)

I _{F(AV)} (A)	Device ⁽⁵⁾	Source ⁽⁴⁾	Package		V _(BR) Range (V)	Max V _F at I _F		T _J Max (°C)
			Family	Type		(V)	(A)	
6	VS-6CUT04x	I	Power Plastic SMD ⁽²⁾⁽³⁾⁽⁹⁾	T0-251AA (IPAK)	40	0.49	3	175
6	VS-6CWT04FNx	I	Power Plastic SMD ⁽²⁾⁽³⁾⁽⁹⁾	T0-252AA (DPAK)	40	0.49	3	175
8	VS-8TT100	I	Power Plastic Through Hole ⁽¹⁾⁽⁸⁾	T0-220AC	100	0.58	8	175
10	VS-MBR10T100	I	Power Plastic Through Hole ⁽¹⁾⁽⁸⁾	T0-220AC	100	0.68	10	175
10	VS-10UT10x	I	Power Plastic SMD ⁽¹⁾⁽³⁾⁽⁹⁾	T0-251AA (IPAK)	100	0.53	10	175
10	VS-10WT10FNx	I	Power Plastic SMD ⁽¹⁾⁽³⁾⁽⁹⁾	T0-252AA (DPAK)	100	0.53	10	175
15	VS-15TT100	I	Power Plastic Through Hole ⁽¹⁾⁽⁸⁾	T0-220AC	100	0.67	15	175
16	VS-16CTT100	I	Power Plastic Through Hole ⁽²⁾⁽⁸⁾	T0-220AB	100	0.69	8	175
18	VS-18TT045-F	I	Power Plastic Through Hole ⁽¹⁾⁽⁸⁾	T0-220AC	45	0.50	18	175
20	VS-20TT100	I	Power Plastic Through Hole ⁽¹⁾⁽⁸⁾	T0-220AB	100	0.67	20	175
20	VS-MBR20T100CT	I	Power Plastic Through Hole ⁽²⁾⁽⁸⁾	T0-220AB	100	0.80	10	175
20	VS-21TT100	I	Power Plastic Through Hole ⁽¹⁾⁽⁸⁾	T0-220AC	100	0.68	20	175
20	VS-20UT04x	I	Power Plastic SMD ⁽¹⁾⁽³⁾⁽⁹⁾	T0-251AA (IPAK)	40	0.415	20	175
20	VS-20WT04FNx	I	Power Plastic SMD ⁽¹⁾⁽³⁾⁽⁹⁾	T0-252AA (DPAK)	40	0.415	20	175
20	VS-20CUT10x	I	Power Plastic SMD ⁽²⁾⁽³⁾⁽⁹⁾	T0-251AA (IPAK)	100	0.615	10	175
20	VS-20CWT10FNx	I	Power Plastic SMD ⁽²⁾⁽³⁾⁽⁹⁾	T0-252AA (DPAK)	100	0.615	10	175
30	VS-30CTT045	I	Power Plastic Through Hole ⁽²⁾⁽⁸⁾	T0-220AB	45	0.50	15	175
30	VS-30CTT050-F	I	Power Plastic Through Hole ⁽²⁾⁽⁸⁾	T0-220AB	50	0.50	15	175
30	VS-30CTT100	I	Power Plastic Through Hole ⁽²⁾⁽⁸⁾	T0-220AB	100	0.79	15	175
30	VS-30PT100	I	Power Plastic Through Hole ⁽¹⁾⁽⁸⁾	T0-247AC (mod)	100	0.64	30	175
30	VS-30CPT100	I	Power Plastic Through Hole ⁽²⁾⁽⁸⁾	T0-247AC	100	0.79	15	175
40	VS-43CTT100	I	Power Plastic Through Hole ⁽²⁾⁽⁸⁾	T0-220AB	100	0.80	20	175
60	VS-60CPT045	I	Power Plastic Through Hole ⁽²⁾⁽⁸⁾	T0-247AC	45	0.50	30	175
40	VS-MBR40H100WT-F	I	Power Plastic Through Hole ⁽²⁾⁽⁸⁾	T0-247AC	100	0.63	20	175
60	VS-63CPT100	I	Power Plastic Through Hole ⁽²⁾⁽⁸⁾	T0-247AC	100	0.76	30	175

Note:

1. Singled die device
2. Dual center-tapped device (V_F limit at I_F is per diode)
3. x designates tube or tape&reel version on SMD products
none = tube
TR = tape and reel centered (for DPAK only)
TRL = tape and reel left oriented
TRR = tape and reel right oriented

4. Source: I = formerly International Rectifier Diode unit
5. Bold text indicates new product
6. Halogen free mould compound and RoHs Compliant
7. Halogen free mould compound and RoHs compliant and totally lead free
8. RoHs compliant and totally lead free
9. RoHs compliant

HPS GEN 3.x (Planar Technology)

I _{F(AV)} (A)	Device ⁽⁵⁾	Source ⁽⁴⁾	Package		V _(BR) Range (V)	Max V _F at I _F		T _J Max (°C)
			Family	Type		(V)	(A)	
3	30BQ100GPBF	I	Plastic SMD ⁽¹⁾⁽³⁾⁽⁹⁾	SMC	100	0.62	3	175
5	VS-50SQ100Gx	I	Plastic Axial ⁽¹⁾⁽³⁾⁽⁹⁾	D0-204AR	60-80-100	0.52	5	175
5	VS-50SQ100Gx-M3	I	Plastic Axial ⁽¹⁾⁽³⁾⁽⁷⁾	D0-204AR	60-80-100	0.52	5	175
8	VS-8TQ100GSxPBF	I	Power Plastic SMD ⁽¹⁾⁽³⁾⁽⁶⁾	D ² PAK	80-100	0.58	8	175
8	VS-8TQ100GPBF	I	Power Plastic Through Hole ⁽¹⁾⁽⁸⁾	T0-220AC	80-100	0.58	8	175
8	VS-8TQ100G-N3	I	Power Plastic Through Hole ⁽¹⁾⁽⁷⁾	T0-220AC	80-100	0.58	8	175
16	VS-16CTQ100GSxPBF	I	Power Plastic SMD ⁽²⁾⁽³⁾⁽⁶⁾	D ² PAK	60-80-100	0.69	8	175
16	VS-16CTQ100GPBF	I	Power Plastic Through Hole ⁽²⁾⁽⁸⁾	T0-220AB	60-80-100	0.69	8	175
16	VS-16CTQ100G-N3	I	Power Plastic Through Hole ⁽²⁾⁽⁷⁾	T0-220AB	60-80-100	0.69	8	175
16	VS-16CTQ100G-1PBF	I	Power Plastic Through Hole ⁽²⁾⁽⁶⁾	T0-262	80-100	0.69	8	175
20	VS-MBRB20100CTGxPBF	I	Power Plastic SMD ⁽²⁾⁽³⁾⁽⁶⁾	D ² PAK	100	0.85	10	175
20	VS-MBR20100CTG-1P	I	Power Plastic Through Hole ⁽²⁾⁽⁶⁾	T0-262	80-100	0.85	10	175
30	VS-30CTQ100GSxPBF	I	Power Plastic SMD ⁽²⁾⁽³⁾⁽⁶⁾	D2-PAK	80-100	0.82	15	175
30	VS-30CTQ100GPBF	I	Power Plastic Through Hole ⁽²⁾⁽⁸⁾	T0-220AB	80-100	0.82	15	175
30	VS-30CTQ100G-N3	I	Power Plastic Through Hole ⁽²⁾⁽⁷⁾	T0-220AB	80-100	0.82	15	175
30	VS-30CTQ100G-1PBF	I	Power Plastic Through Hole ⁽²⁾⁽⁶⁾	T0-262	80-100	0.82	15	175
30	VS-30CPQ100GPBF	I	Power Plastic Through Hole ⁽²⁾⁽⁸⁾	T0-247	80-100	0.81	15	175
30	VS-30CPQ100G-N3	I	Power Plastic Through Hole ⁽²⁾⁽⁷⁾	T0-247	80-100	0.81	15	175
40	VS-43CTQ100GSxPBF	I	Power Plastic SMD ⁽²⁾⁽³⁾⁽⁶⁾	D ² PAK	80-100	0.81	20	175
40	VS-43CTQ100GPBF	I	Power Plastic Through Hole ⁽²⁾⁽⁸⁾	T0-220AB	100	0.81	20	175
40	VS-43CTQ100G-N3	I	Power Plastic Through Hole ⁽²⁾⁽⁷⁾	T0-220AB	80-100	0.81	20	175
40	VS-43CTQ100G-1PBF	I	Power Plastic Through Hole ⁽²⁾⁽⁶⁾	T0-262	80-100	0.81	20	175
40	VS-40CPQ100GPBF	I	Power Plastic Through Hole ⁽²⁾⁽⁸⁾	T0-247	80-100	0.75	20	175
40	VS-40CPQ100G-N3	I	Power Plastic Through Hole ⁽²⁾⁽⁷⁾	T0-247	80-100	0.75	20	175
60	VS-63CTQ100GPBF	I	Power Plastic Through Hole ⁽²⁾⁽⁸⁾	T0-220AB	100	0.83	30	175
60	VS-63CTQ100G-N3	I	Power Plastic Through Hole ⁽²⁾⁽⁷⁾	T0-220AB	100	0.83	30	175
60	VS-63CPQ100GPBF	I	Power Plastic Through Hole ⁽²⁾⁽⁸⁾	T0-247	80-100	0.76	30	175
60	VS-63CPQ100G-N3	I	Power Plastic Through Hole ⁽²⁾⁽⁷⁾	T0-247	80-100	0.76	30	175

Note:

1. Singled die device
2. Dual center-tapped device (V_F limit at I_F is per diode)
3. x designates tube or tape&reel version on SMD products
none = tube
TR = tape and reel centered (for DPAK only)
TRL = tape and reel left oriented
TRR = tape and reel right oriented

4. Source: I = formerly International Rectifier Diode unit
5. Bold text indicates new product
6. Halogen free mould compound and RoHs Compliant
7. Halogen free mould compound and RoHs compliant and totally lead free
8. RoHs compliant and totally lead free
9. RoHs compliant

HPS GEN 2.x (Planar Technology)

I _{F(AV)} (A)	Device ⁽⁵⁾	Source ⁽⁴⁾	Package		V _(BR) Range (V)	Max V _F at I _F		T _J Max (°C)
			Family ⁽³⁾	Type		(V)	(A)	
1	VS-1N5817x	I	Plastic Axial ⁽¹⁾⁽³⁾⁽⁹⁾	D0-204AL	20	0.45	1	150
1	VS-1N5817x-M3	I	Plastic Axial⁽¹⁾⁽³⁾⁽⁶⁾	D0-204AL	20	0.45	1	150
1	VS-MBR1100x	I	Plastic Axial ⁽¹⁾⁽³⁾⁽⁹⁾	D0-204AL	100	0.68	1	150
1	VS-MBR1100x-M3	I	Plastic Axial⁽¹⁾⁽³⁾⁽⁶⁾	D0-204AL	100	0.68	1	150
1	VS-1N5819x	I	Plastic Axial ⁽¹⁾⁽³⁾⁽⁹⁾	D0-204AL	30-40	0.55	1	150
1	VS-1N5819x-M3	I	Plastic Axial⁽¹⁾⁽³⁾⁽⁶⁾	D0-204AL	30-40	0.55	1	150
1	VS-MBR160x	I	Plastic Axial ⁽¹⁾⁽³⁾⁽⁹⁾	D0-204AL	50-60	0.65	1	150
1	VS-MBR160x-M3	I	Plastic Axial⁽¹⁾⁽³⁾⁽⁶⁾	D0-204AL	50-60	0.65	1	150
1	VS-MBRA120PBF	I	Plastic SMD ⁽¹⁾⁽³⁾⁽⁹⁾	SMA	20	0.35	1	150
1	VS-10MQ040-M3	I	Plastic SMD⁽¹⁾⁽³⁾⁽⁶⁾	SMA	40	0.49	1	150
1	VS-MBRA140PBF	I	Plastic SMD ⁽¹⁾⁽³⁾⁽⁹⁾	SMA	40	0.49	1	150
1	VS-10MQ060-M3	I	Plastic SMD⁽¹⁾⁽³⁾⁽⁶⁾	SMA	60	0.57	1	150
1	VS-10BQ015PBF	I	Plastic SMD ⁽¹⁾⁽³⁾⁽⁹⁾	SMB	15	0.32	1	125
1	VS-MBRS120PBF	I	Plastic SMD ⁽¹⁾⁽³⁾⁽⁹⁾	SMB	20	0.35	1	150
1	VS-10BQ030PBF	I	Plastic SMD ⁽¹⁾⁽³⁾⁽⁹⁾	SMB	30	0.30	1	150
1	VS-MBRS130LPBF	I	Plastic SMD ⁽¹⁾⁽³⁾⁽⁹⁾	SMB	30	0.30	1	125
1	VS-MBRS130PBF	I	Plastic SMD ⁽¹⁾⁽³⁾⁽⁹⁾	SMB	30	0.42	1	125
1	VS-10BQ040PBF	I	Plastic SMD ⁽¹⁾⁽³⁾⁽⁹⁾	SMB	40	0.49	1	150
1	VS-MBRS140PBF	I	Plastic SMD ⁽¹⁾⁽³⁾⁽⁹⁾	SMB	40	0.53	1	150
1	VS-10BQ060PBF	I	Plastic SMD ⁽¹⁾⁽³⁾⁽⁹⁾	SMB	60	0.57	1	150
1	VS-10BQ100PBF	I	Plastic SMD ⁽¹⁾⁽³⁾⁽⁹⁾	SMB	100	0.62	1	175
1	VS-MBRS1100PBF	I	Plastic SMD ⁽¹⁾⁽³⁾⁽⁹⁾	SMB	90-100	0.62	1	175
1.5	VS-10MQ060NPBF	I	Plastic SMD ⁽¹⁾⁽³⁾⁽⁹⁾	SMA	60	0.63	1.5	150
1.1	VS-11DQ04x	I	Plastic Axial ⁽¹⁾⁽³⁾⁽⁹⁾	D0-204AL	30-40	0.50	1	150
1.1	VS-11DQ04x-M3	I	Plastic Axial⁽¹⁾⁽³⁾⁽⁶⁾	D0-204AL	30-40	0.50	1	150
1.1	VS-11DQ06x	I	Plastic Axial ⁽¹⁾⁽³⁾⁽⁹⁾	D0-204AL	50-60	0.53	1	150
1.1	VS-11DQ06x-M3	I	Plastic Axial⁽¹⁾⁽³⁾⁽⁶⁾	D0-204AL	50-60	0.53	1	150
1.1	VS-11DQ10x	I	Plastic Axial ⁽¹⁾⁽³⁾⁽⁹⁾	D0-204AL	90-100	0.68	1	150
1.1	VS-11DQ10x-M3	I	Plastic Axial⁽¹⁾⁽³⁾⁽⁶⁾	D0-204AL	90-100	0.68	1	150
1.5	VS-15MQ040-M3	I	Plastic SMD⁽¹⁾⁽³⁾⁽⁶⁾	SMA	40	0.34	1.5	150
2	VS-21DQ04x	I	Plastic Axial ⁽¹⁾⁽³⁾⁽⁹⁾	D0-204AL	40	0.50	2	150
2	VS-21DQ04x-M3	I	Plastic Axial⁽¹⁾⁽³⁾⁽⁶⁾	D0-204AL	40	0.50	2	150
2	VS-21DQ06x	I	Plastic Axial ⁽¹⁾⁽³⁾⁽⁹⁾	D0-204AL	60	0.55	2	150
2	VS-21DQ06x-M3	I	Plastic Axial⁽¹⁾⁽³⁾⁽⁶⁾	D0-204AL	60	0.55	2	150

Note:

1. Singled die device
2. Dual center-tapped device (V_F limit at I_F is per diode)
3. x designates tube or tape&reel version on SMD products
none = tube
TR = tape and reel centered (for DPAK only)
TRL = tape and reel left oriented
TRR = tape and reel right oriented

4. Source: I = formerly International Rectifier Diode unit
5. Bold text indicates new product
6. Halogen free mould compound and RoHs Compliant
7. Halogen free mould compound and RoHs compliant and totally lead free
8. RoHs compliant and totally lead free
9. RoHs compliant



RECTIFIERS

Schottky Rectifiers



HPS GEN 2.x (Planar Technology), continued

I _{F(AV)} (A)	Device ⁽⁵⁾	Source ⁽⁴⁾	Package		V _(BR) Range (V)	Max V _F at I _F		T _J Max (°C)
			Family ⁽³⁾	Type		(V)	(A)	
2	VS-20BQ030PBF	I	Plastic SMD ⁽¹⁾⁽³⁾⁽⁹⁾	SMB	30	0.37	2	150
2	VS-20MQ040-M3	I	Plastic SMD ⁽¹⁾⁽³⁾⁽⁶⁾	SMA	40	0.63	2	150
2	VS-20MQ060-M3	I	Plastic SMD ⁽¹⁾⁽³⁾⁽⁶⁾	SMA	60	0.68	2	150
2	VS-20MQ100-M3	I	Plastic SMD ⁽¹⁾⁽³⁾⁽⁶⁾	SMA	100	0.72	2	150
2.1	VS-10MQ040NPBF	I	Plastic SMD ⁽¹⁾⁽³⁾⁽⁹⁾	SMA	40	0.56	1.5	150
2.1	VS-20MQ040PBF	I	Plastic SMD ⁽¹⁾⁽³⁾⁽⁹⁾	SMA	40	0.63	2	150
2.1	VS-20MQ060PBF	I	Plastic SMD ⁽¹⁾⁽³⁾⁽⁹⁾	SMA	60	0.68	2	150
2.1	VS-10MQ100NPBF	I	Plastic SMD ⁽¹⁾⁽³⁾⁽⁹⁾	SMA	100	0.68	1.5	150
2.1	VS-10MQ100-M3	I	Plastic SMD ⁽¹⁾⁽³⁾⁽⁶⁾	SMA	100	0.63	1	150
2.1	VS-20MQ100PBF	I	Plastic SMD ⁽¹⁾⁽³⁾⁽⁹⁾	SMA	100	0.72	2	150
3	VS-1N5820x	I	Plastic Axial ⁽¹⁾⁽³⁾⁽⁹⁾	C-16	20	0.47	3	150
3	VS-1N5820x-M3	I	Plastic Axial ⁽¹⁾⁽³⁾⁽⁶⁾	C-16	20	0.47	3	150
3	VS-MBR340x	I	Plastic Axial ⁽¹⁾⁽³⁾⁽⁹⁾	DO-204AL	40	0.49	3	150
3	VS-MBR340x-M3	I	Plastic Axial ⁽¹⁾⁽³⁾⁽⁶⁾	DO-204AL	40	0.49	3	150
3	VS-MBR360x	I	Plastic Axial ⁽¹⁾⁽³⁾⁽⁹⁾	C-16	50-60	0.64	3	150
3	VS-MBR360x-M3	I	Plastic Axial ⁽¹⁾⁽³⁾⁽⁶⁾	C-16	50-60	0.64	3	150
3	VS-15MQ040NPBF	I	Plastic SMD ⁽¹⁾⁽³⁾⁽⁹⁾	SMA	40	0.43	2	150
3	VS-30BQ015-M3	I	Plastic SMD ⁽¹⁾⁽³⁾⁽⁶⁾	SMC	15	0.30	3	125
3	VS-30BQ015PBF	I	Plastic SMD ⁽¹⁾⁽³⁾⁽⁹⁾	SMC	15	0.30	3	125
3	VS-MBRS320PBF	I	Plastic SMD ⁽¹⁾⁽³⁾⁽⁹⁾	SMC	20	0.36	3	150
3	VS-30MQ040-M3	I	Plastic SMD ⁽¹⁾⁽³⁾⁽⁶⁾	SMA	40	0.46	3	150
3	VS-30BQ040-M3	I	Plastic SMD ⁽¹⁾⁽³⁾⁽⁶⁾	SMC	40	0.43	3	150
3	VS-30BQ040PBF	I	Plastic SMD ⁽¹⁾⁽³⁾⁽⁹⁾	SMC	40	0.43	3	150
3	VS-MBRS340PBF	I	Plastic SMD ⁽¹⁾⁽³⁾⁽⁹⁾	SMC	40	0.43	3	150
3	VS-30BQ060-M3	I	Plastic SMD ⁽¹⁾⁽³⁾⁽⁶⁾	SMC	60	0.52	3	150
3	VS-30BQ060PBF	I	Plastic SMD ⁽¹⁾⁽³⁾⁽⁹⁾	SMC	60	0.52	3	150
3	VS-30BQ100-M3	I	Plastic SMD ⁽¹⁾⁽³⁾⁽⁶⁾	SMC	100	0.62	3	175
3	VS-30BQ100PBF	I	Plastic SMD ⁽¹⁾⁽³⁾⁽⁹⁾	SMC	100	0.62	3	175
3	VS-MBRS360PBF	I	Plastic SMD ⁽¹⁾⁽³⁾⁽⁹⁾	SMC	50-60	0.61	3	150
3	VS-MBRD320xPBF	I	Power Plastic SMD ⁽¹⁾⁽³⁾⁽⁹⁾	TO-252AA (DPAK)	20	0.49	3	150
3	VS-MBRD320x-M3	I	Power Plastic SMD ⁽¹⁾⁽³⁾⁽⁶⁾	TO-252AA (DPAK)	20	0.49	3	150
3	VS-MBRD330xPBF	I	Power Plastic SMD ⁽¹⁾⁽³⁾⁽⁹⁾	TO-252AA (DPAK)	30	0.49	3	150
3	VS-MBRD330x-M3	I	Power Plastic SMD ⁽¹⁾⁽³⁾⁽⁶⁾	TO-252AA (DPAK)	30	0.49	3	150
3	VS-MBRD340xPBF	I	Power Plastic SMD ⁽¹⁾⁽³⁾⁽⁹⁾	TO-252AA (DPAK)	40	0.49	3	150

Note:

1. Singled die device
2. Dual center-tapped device (V_F limit at I_F is per diode)
3. x designates tube or tape&reel version on SMD products
none = tube
TR = tape and reel centered (for DPAK only)
TRL = tape and reel left oriented
TRR = tape and reel right oriented

4. Source: I = formerly International Rectifier Diode unit
5. Bold text indicates new product
6. Halogen free mould compound and RoHs Compliant
7. Halogen free mould compound and RoHs compliant and totally lead free
8. RoHs compliant and totally lead free
9. RoHs compliant



RECTIFIERS

Schottky Rectifiers



HPS GEN 2.x (Planar Technology), continued

I _{F(AV)} (A)	Device ⁽⁵⁾	Source ⁽⁴⁾	Package		V _(BR) Range (V)	Max V _F at I _F		T _j Max (°C)
			Family ⁽³⁾	Type		(V)	(A)	
3	VS-MBRD340x-M3	I	Power Plastic SMD ⁽¹⁾⁽³⁾⁽⁶⁾	TO-252AA (DPAK)	40	0.49	3	150
3.3	VS-31DQ04x	I	Plastic Axial ⁽¹⁾⁽³⁾⁽⁹⁾	C-16	30-40	0.51	3	150
3.3	VS-31DQ04x-M3	I	Plastic Axial ⁽¹⁾⁽³⁾⁽⁶⁾	C-16	30-40	0.51	3	150
3.3	VS-31DQ06x	I	Plastic Axial ⁽¹⁾⁽³⁾⁽⁹⁾	C-16	50-60	0.54	3	150
3.3	VS-31DQ06x-M3	I	Plastic Axial ⁽¹⁾⁽³⁾⁽⁶⁾	C-16	50-60	0.54	3	150
3.3	VS-31DQ10x	I	Plastic Axial ⁽¹⁾⁽³⁾⁽⁹⁾	C-16	90-100	0.69	3	150
3.3	VS-31DQ10x-M3	I	Plastic Axial ⁽¹⁾⁽³⁾⁽⁶⁾	C-16	90-100	0.69	3	150
3.5	VS-30WQ03FNxPBF	I	Power Plastic SMD ⁽¹⁾⁽³⁾⁽⁹⁾	TO-252AA (DPAK)	30	0.35	3	150
3.5	VS-30WQ04FNxPBF	I	Power Plastic SMD ⁽¹⁾⁽³⁾⁽⁹⁾	TO-252AA (DPAK)	40	0.49	3	150
3.5	VS-30WQ04FNx-M3	I	Power Plastic SMD ⁽¹⁾⁽³⁾⁽⁶⁾	TO-252AA (DPAK)	40	0.49	3	150
3.5	VS-30WQ06FNxPBF	I	Power Plastic SMD ⁽¹⁾⁽³⁾⁽⁹⁾	TO-252AA (DPAK)	60	0.53	3	150
3.5	VS-30WQ06FNx-M3	I	Power Plastic SMD ⁽¹⁾⁽³⁾⁽⁶⁾	TO-252AA (DPAK)	60	0.53	3	150
3.5	VS-30WQ10FNxPBF	I	Power Plastic SMD ⁽¹⁾⁽³⁾⁽⁹⁾	TO-252AA (DPAK)	100	0.63	3	150
3.5	VS-30WQ10FNx-M3	I	Power Plastic SMD ⁽¹⁾⁽³⁾⁽⁶⁾	TO-252AA (DPAK)	100	0.63	3	150
3.5	VS-30WQ03FNx-M3	I	Power Plastic SMD ⁽¹⁾⁽³⁾⁽⁶⁾	TO-252AA (DPAK)	30	0.35	3	150
5	VS-50SQ100x	I	Plastic Axial ⁽¹⁾⁽³⁾⁽⁹⁾	D0-204AR	60-80-100	0.52	5	175
5	VS-50SQ100x-M3	I	Plastic Axial ⁽¹⁾⁽³⁾⁽⁶⁾	D0-204AR	60-80-100	0.52	5	175
5.5	VS-50WQ03FNxPBF	I	Power Plastic SMD ⁽¹⁾⁽³⁾⁽⁹⁾	TO-252AA (DPAK)	30	0.35	5	150
5.5	VS-50WQ03FNx-M3	I	Power Plastic SMD ⁽¹⁾⁽³⁾⁽⁶⁾	TO-252AA (DPAK)	30	0.35	5	150
5.5	VS-50WQ04FNxPBF	I	Power Plastic SMD ⁽¹⁾⁽³⁾⁽⁹⁾	TO-252AA (DPAK)	40	0.44	5	150
5.5	VS-50WQ04FNx-M3	I	Power Plastic SMD ⁽¹⁾⁽³⁾⁽⁶⁾	TO-252AA (DPAK)	40	0.44	5	150
5.5	VS-50WQ06FNxPBF	I	Power Plastic SMD ⁽¹⁾⁽³⁾⁽⁹⁾	TO-252AA (DPAK)	60	0.54	5	150
5.5	VS-50WQ06FNx-M3	I	Power Plastic SMD ⁽¹⁾⁽³⁾⁽⁶⁾	TO-252AA (DPAK)	60	0.54	5	150
5.5	VS-50WQ10FNxPBF	I	Power Plastic SMD ⁽¹⁾⁽³⁾⁽⁹⁾	TO-252AA (DPAK)	100	0.63	5	150
5.5	VS-50WQ10FNx-M3	I	Power Plastic SMD ⁽¹⁾⁽³⁾⁽⁶⁾	TO-252AA (DPAK)	100	0.63	5	150
6	VS-6CWQ03FNxPBF	I	Power Plastic SMD ⁽²⁾⁽³⁾⁽⁹⁾	TO-252AA (DPAK)	30	0.46	6	150
6	VS-6CWQ03FNx-M3	I	Power Plastic SMD ⁽²⁾⁽³⁾⁽⁶⁾	TO-252AA (DPAK)	30	0.46	6	150
6	VS-6CWQ04FNxPBF	I	Power Plastic SMD ⁽²⁾⁽³⁾⁽⁹⁾	TO-252AA (DPAK)	40	0.62	6	150
6	VS-6CWQ04FNx-M3	I	Power Plastic SMD ⁽²⁾⁽³⁾⁽⁶⁾	TO-252AA (DPAK)	40	0.62	6	150
6	VS-6CWQ06FNxPBF	I	Power Plastic SMD ⁽²⁾⁽³⁾⁽⁹⁾	TO-252AA (DPAK)	60	0.65	3	150
6	VS-6CWQ06FNx-M3	I	Power Plastic SMD ⁽²⁾⁽³⁾⁽⁶⁾	TO-252AA (DPAK)	60	0.65	3	150
6	VS-6CWQ10FNxPBF	I	Power Plastic SMD ⁽²⁾⁽³⁾⁽⁹⁾	TO-252AA (DPAK)	100	0.74	6	150
6	VS-6CWQ10FNx-M3	I	Power Plastic SMD ⁽²⁾⁽³⁾⁽⁶⁾	TO-252AA (DPAK)	100	0.74	6	150
6	VS-MBRD660CTxPBF	I	Power Plastic SMD ⁽²⁾⁽³⁾⁽⁹⁾	TO-252AA (DPAK)	50-60	0.65	3	150

Note:

1. Singled die device
2. Dual center-tapped device (V_F limit at I_F is per diode)
3. x designates tube or tape&reel version on SMD products
none = tube
TR = tape and reel centered (for DPAK only)
TRL = tape and reel left oriented
TRR = tape and reel right oriented

4. Source: I = formerly International Rectifier Diode unit
5. Bold text indicates new product
6. Halogen free mould compound and RoHs Compliant
7. Halogen free mould compound and RoHs compliant and totally lead free
8. RoHs compliant and totally lead free
9. RoHs compliant



RECTIFIERS

Schottky Rectifiers



HPS GEN 2.x (Planar Technology), continued

I _{F(AV)} (A)	Device ⁽⁵⁾	Source ⁽⁴⁾	Package		V _(BR) Range (V)	Max V _F at I _F		T _J Max (°C)
			Family ⁽³⁾	Type		(V)	(A)	
6	VS-MBRD660CTx-M3	I	Power Plastic SMD ⁽²⁾⁽³⁾⁽⁶⁾	TO-252AA (DPAK)	50-60	0.65	3	150
6	VS-6TQ045SxPBF	I	Power Plastic SMD ⁽¹⁾⁽³⁾⁽⁶⁾	TO-263AB (D ² PAK)	35-40-45	0.53	6	175
6	VS-6TQ045PBF	I	Power Plastic Through Hole ⁽¹⁾⁽⁸⁾	TO-220AC	35-40-45	0.53	6	175
6	VS-6TQ045-N3	I	Power Plastic Through Hole ⁽¹⁾⁽⁷⁾	TO-220AC	35-40-45	0.53	6	175
7.5	VS-MBRB745xPBF	I	Power Plastic SMD ⁽¹⁾⁽³⁾⁽⁶⁾	TO-263AB (D ² PAK)	35-40-45	0.57	7.5	150
7.5	VS-MBR745PBF	I	Power Plastic Through Hole ⁽¹⁾⁽⁸⁾	TO-220AC	35-40-45	0.57	7.5	150
7.5	VS-MBR745-N3	I	Power Plastic Through Hole ⁽¹⁾⁽⁷⁾	TO-220AC	35-40-45	0.57	7.5	150
8	VS-80SQ045x	I	Plastic Axial ⁽¹⁾⁽³⁾⁽⁹⁾	DO-204AR	30-35-40-45	0.44	8	175
8	VS-80SQ045x-M3	I	Plastic Axial ⁽¹⁾⁽³⁾⁽⁶⁾	DO-204AR	30-35-40-45	0.44	8	175
8	VS-8TQ100SxPBF	I	Power Plastic SMD ⁽¹⁾⁽³⁾⁽⁶⁾	TO-263AB (D ² PAK)	80-100	0.58	8	175
8	VS-8TQ100PBF	I	Power Plastic Through Hole ⁽¹⁾⁽⁸⁾	TO-220AC	60-80-100	0.69	8	175
8	VS-8TQ100-N3	I	Power Plastic Through Hole ⁽¹⁾⁽⁷⁾	TO-220AC	60-80-100	0.69	8	175
9	VS-95SQ015x	I	Plastic Axial ⁽¹⁾⁽³⁾⁽⁹⁾	DO-204AR	15	0.30	9	125
9	VS-95SQ015x-M3	I	Plastic Axial ⁽¹⁾⁽³⁾⁽⁶⁾	DO-204AR	15	0.30	9	125
9	VS-90SQ045x	I	Plastic Axial ⁽¹⁾⁽³⁾⁽⁹⁾	DO-204AR	30-35-40-45	0.42	9	150
9	VS-90SQ045x-M3	I	Plastic Axial ⁽¹⁾⁽³⁾⁽⁶⁾	DO-204AR	30-35-40-45	0.42	9	150
10	VS-10WQ045FNxPBF	I	Power Plastic SMD ⁽¹⁾⁽³⁾⁽⁹⁾	TO-252AA (DPAK)	45	0.53	10	175
10	VS-10WQ045FNx-M3	I	Power Plastic SMD ⁽¹⁾⁽³⁾⁽⁶⁾	TO-252AA (DPAK)	45	0.53	10	175
10	VS-10CTQ150SxPBF	I	Power Plastic SMD ⁽²⁾⁽³⁾⁽⁶⁾	TO-263AB (D ² PAK)	150	0.86	5	175
10	VS-10TQ045SxPBF	I	Power Plastic SMD ⁽¹⁾⁽³⁾⁽⁶⁾	TO-263AB (D ² PAK)	35-40-45	0.49	10	175
10	VS-MBRB1045xPBF	I	Power Plastic SMD ⁽¹⁾⁽³⁾⁽⁶⁾	TO-263AB (D ² PAK)	35-40-45	0.57	10	150
10	VS-10CTQ150-1PBF	I	Power Plastic Through Hole ⁽²⁾⁽⁶⁾	TO-262 (I ² PAK)	150	0.86	5	175
10	VS-10CTQ150PBF	I	Power Plastic Through Hole ⁽²⁾⁽⁸⁾	TO-220AB	150	0.86	5	175
10	VS-10CTQ150-N3	I	Power Plastic Through Hole ⁽²⁾⁽⁷⁾	TO-220AB	150	0.86	5	175
10	VS-10TQ045PBF	I	Power Plastic Through Hole ⁽¹⁾⁽⁸⁾	TO-220AC	35-40-45	0.49	10	175
10	VS-10TQ045-N3	I	Power Plastic Through Hole ⁽¹⁾⁽⁷⁾	TO-220AC	35-40-45	0.49	10	175
10	VS-MBR1045PBF	I	Power Plastic Through Hole ⁽²⁾⁽⁸⁾	TO-220AB	35-40-45	0.57	10	150
10	VS-MBR1045-N3	I	Power Plastic Through Hole ⁽²⁾⁽⁷⁾	TO-220AB	35-40-45	0.57	10	150
12	VS-12CWQ03FNxPBF	I	Power Plastic SMD ⁽²⁾⁽³⁾⁽⁹⁾	TO-252AA (DPAK)	30	0.49	6	150
12	VS-12CWQ03FNx-M3	I	Power Plastic SMD ⁽²⁾⁽³⁾⁽⁶⁾	TO-252AA (DPAK)	30	0.49	6	150
12	VS-12CWQ04FNxPBF	I	Power Plastic SMD ⁽²⁾⁽³⁾⁽⁹⁾	TO-252AA (DPAK)	40	0.64	6	150
12	VS-12CWQ04FNx-M3	I	Power Plastic SMD ⁽²⁾⁽³⁾⁽⁶⁾	TO-252AA (DPAK)	40	0.64	6	150
12	VS-12CWQ06FNxPBF	I	Power Plastic SMD ⁽²⁾⁽³⁾⁽⁹⁾	TO-252AA (DPAK)	60	0.72	6	150
12	VS-12CWQ06FNx-M3	I	Power Plastic SMD ⁽²⁾⁽³⁾⁽⁶⁾	TO-252AA (DPAK)	60	0.72	6	150

Note:

1. Singled die device
2. Dual center-tapped device (V_F limit at I_F is per diode)
3. x designates tube or tape&reel version on SMD products
none = tube
TR = tape and reel centered (for DPAK only)
TRL = tape and reel left oriented
TRR = tape and reel right oriented

4. Source: I = formerly International Rectifier Diode unit
5. Bold text indicates new product
6. Halogen free mould compound and RoHs Compliant
7. Halogen free mould compound and RoHs compliant and totally lead free
8. RoHs compliant and totally lead free
9. RoHs compliant



RECTIFIERS

Schottky Rectifiers



HPS GEN 2.x (Planar Technology), continued

I _{F(AV)} (A)	Device ⁽⁵⁾	Source ⁽⁴⁾	Package		V _(BR) Range (V)	Max V _F at I _F		T _J Max (°C)
			Family ⁽³⁾	Type		(V)	(A)	
12	VS-12CWQ10FNxPBF	I	Power Plastic SMD ⁽²⁾⁽³⁾⁽⁹⁾	TO-252AA (DPAK)	100	0.78	6	150
12	VS-12CWQ10FNx-M3	I	Power Plastic SMD⁽²⁾⁽³⁾⁽⁶⁾	TO-252AA (DPAK)	100	0.78	6	150
12	VS-12CTQ045SxPBF	I	Power Plastic SMD ⁽²⁾⁽³⁾⁽⁶⁾	TO-263AB (D ² PAK)	35-40-45	0.64	6	175
12	VS-12TQ045SxPBF	I	Power Plastic SMD ⁽¹⁾⁽³⁾⁽⁶⁾	TO-263AB (D ² PAK)	35-40-45	0.50	15	150
12	VS-12CTQ045PBF	I	Power Plastic Through Hole ⁽²⁾⁽⁸⁾	TO-220AB	35-40-45	0.64	6	175
12	VS-12CTQ045-N3	I	Power Plastic Through Hole⁽²⁾⁽⁷⁾	TO-220AB	35-40-45	0.64	6	175
12	VS-12TQ045PBF	I	Power Plastic Through Hole ⁽¹⁾⁽⁸⁾	TO-220AC	35-40-45	0.50	12	150
12	VS-12TQ045-N3	I	Power Plastic Through Hole⁽¹⁾⁽⁷⁾	TO-220AC	35-40-45	0.50	12	150
15	VS-150SQ045x	I	Plastic Axial ⁽¹⁾⁽³⁾⁽⁹⁾	DO-204AR	30-35-40-45	0.64	15	150
15	VS-150SQ045x-M3	I	Plastic Axial⁽¹⁾⁽³⁾⁽⁶⁾	DO-204AR	30-35-40-45	0.64	15	150
15	VS-15TQ060SxPBF	I	Power Plastic SMD ⁽¹⁾⁽³⁾⁽⁶⁾	TO-263AB (D ² PAK)	60	0.56	15	150
15	VS-15CTQ045SxPBF	I	Power Plastic SMD ⁽²⁾⁽³⁾⁽⁶⁾	TO-263AB (D ² PAK)	35-40-45	0.65	7.5	150
15	VS-MBRB1545CTxPBF	I	Power Plastic SMD ⁽²⁾⁽³⁾⁽⁶⁾	TO-263AB (D ² PAK)	35-40-45	0.72	7.5	150
15	VS-15CTQ045-1PBF	I	Power Plastic Through Hole ⁽²⁾⁽⁶⁾	TO-262 (I ² PAK)	35-40-45	0.65	7.5	150
15	VS-MBR1545CT-1PBF	I	Power Plastic Through Hole ⁽²⁾⁽⁶⁾	TO-262 (I ² PAK)	35-40-45	0.72	7.5	150
15	VS-15TQ060PBF	I	Power Plastic Through Hole ⁽¹⁾⁽⁸⁾	TO-220AC	60	0.56	15	150
15	VS-15TQ060-N3	I	Power Plastic Through Hole⁽¹⁾⁽⁷⁾	TO-220AC	60	0.56	15	150
15	VS-15CTQ045PBF	I	Power Plastic Through Hole ⁽²⁾⁽⁸⁾	TO-220AB	35-40-45	0.65	7.5	150
15	VS-15CTQ045-N3	I	Power Plastic Through Hole⁽²⁾⁽⁷⁾	TO-220AB	35-40-45	0.65	7.5	150
15	VS-MBR1545CTPBF	I	Power Plastic Through Hole ⁽²⁾⁽⁸⁾	TO-220AB	35-40-45	0.72	7.5	150
15	VS-MBR1545CT-N3	I	Power Plastic Through Hole⁽²⁾⁽⁷⁾	TO-220AB	35-40-45	0.72	7.5	150
16	VS-MBRB1645xPBF	I	Power Plastic SMD ⁽¹⁾⁽³⁾⁽⁶⁾	TO-263AB (D ² PAK)	35-40-45	0.57	16	150
16	VS-16CTQ100SxPBF	I	Power Plastic SMD ⁽²⁾⁽³⁾⁽⁶⁾	TO-263AB (D ² PAK)	80-100	0.69	8	175
16	VS-MBRB1645-1PBF	I	Power Plastic Through Hole ⁽²⁾⁽⁶⁾	TO-262 (I ² PAK)	35-40-45	0.57	16	150
16	VS-16CTQ100-1PBF	I	Power Plastic Through Hole ⁽²⁾⁽⁶⁾	TO-262 (I ² PAK)	80-100	0.69	8	175
16	VS-MBR1645PBF	I	Power Plastic Through Hole ⁽¹⁾⁽⁸⁾	TO-220AC	35-40-45	0.57	16	150
16	VS-MBR1645-N3	I	Power Plastic Through Hole⁽¹⁾⁽⁷⁾	TO-220AC	35-40-45	0.57	16	150
18	VS-18TQ045PBF	I	Power Plastic Through Hole ⁽¹⁾⁽⁸⁾	TO-220AC	35-40-45-50	0.53	18	175
18	VS-18TQ045-N3	I	Power Plastic Through Hole⁽¹⁾⁽⁷⁾	TO-220AC	35-40-45-50	0.53	18	175
16	VS-16CTQ100PBF	I	Power Plastic Through Hole ⁽²⁾⁽⁸⁾	TO-220AB	60-80-100	0.69	8	175
16	VS-16CTQ100-N3	I	Power Plastic Through Hole⁽²⁾⁽⁷⁾	TO-220AB	60-80-100	0.69	8	175
18	VS-18TQ045SxPBF	I	Power Plastic SMD ⁽¹⁾⁽³⁾⁽⁶⁾	TO-263AB (D ² PAK)	35-40-45	0.53	18	175
19	VS-19TQ015SxPBF	I	Power Plastic SMD ⁽¹⁾⁽³⁾⁽⁶⁾	TO-263AB (D ² PAK)	15	0.32	19	125
19	VS-19TQ015PBF	I	Power Plastic Through Hole ⁽¹⁾⁽⁸⁾	TO-220AC	15	0.32	19	125

Note:

1. Singled die device
2. Dual center-tapped device (V_F limit at I_F is per diode)
3. x designates tube or tape&reel version on SMD products
none = tube
TR = tape and reel centered (for DPAK only)
TRL = tape and reel left oriented
TRR = tape and reel right oriented

4. Source: I = formerly International Rectifier Diode unit
5. Bold text indicates new product
6. Halogen free mould compound and RoHs Compliant
7. Halogen free mould compound and RoHs compliant and totally lead free
8. RoHs compliant and totally lead free
9. RoHs compliant



RECTIFIERS

Schottky Rectifiers



HPS GEN 2.x (Planar Technology), continued

I _{F(AV)} (A)	Device ⁽⁵⁾	Source ⁽⁴⁾	Package		V _(BR) Range (V)	Max V _F at I _F		T _J Max (°C)
			Family ⁽³⁾	Type		(V)	(A)	
19	VS-19TQ015-N3	I	Power Plastic Through Hole ⁽¹⁾⁽⁷⁾	TO-220AC	15	0.32	19	125
20	VS-20L15TSxPBF	I	Power Plastic SMD ⁽²⁾⁽³⁾⁽⁶⁾	TO-263AB (D ² PAK)	15	0.33	20	125
20	VS-20CTQ150SxPBF	I	Power Plastic SMD ⁽²⁾⁽³⁾⁽⁶⁾	TO-263AB (D ² PAK)	150	0.77	10	175
20	VS-20CTQ045SxPBF	I	Power Plastic SMD ⁽²⁾⁽³⁾⁽⁶⁾	TO-263AB (D ² PAK)	35-40-45	0.68	10	175
20	VS-20TQ045SxPBF	I	Power Plastic SMD ⁽¹⁾⁽³⁾⁽⁶⁾	TO-263AB (D ² PAK)	35-40-45	0.51	10	150
20	VS-MBRB2045CTxPBF	I	Power Plastic SMD ⁽²⁾⁽³⁾⁽⁶⁾	TO-263AB (D ² PAK)	35-40-45	0.72	10	150
20	VS-MBRB20100CTxPBF	I	Power Plastic SMD ⁽²⁾⁽³⁾⁽⁶⁾	TO-263AB (D ² PAK)	80-90-100	0.85	10	150
20	VS-20CTQ045-1PBF	I	Power Plastic Through Hole ⁽²⁾⁽⁶⁾	TO-262 (I ² PAK)	45	0.68	10	175
20	VS-20CTQ150-1PBF	I	Power Plastic Through Hole ⁽²⁾⁽⁶⁾	TO-262 (I ² PAK)	150	0.77	10	175
20	VS-MBR2045CT-1PBF	I	Power Plastic Through Hole ⁽²⁾⁽⁶⁾	TO-262 (I ² PAK)	35-40-45	0.72	10	150
20	VS-MBR20100CT-1PBF	I	Power Plastic Through Hole ⁽²⁾⁽⁶⁾	TO-262 (I ² PAK)	80-90-100	0.85	10	150
20	VS-20L15TPBF	I	Power Plastic Through Hole ⁽¹⁾⁽⁸⁾	TO-220AC	15	0.33	20	125
20	VS-20L15T-N3	I	Power Plastic Through Hole ⁽¹⁾⁽⁷⁾	TO-220AC	15	0.33	20	125
20	VS-20CTQ150PBF	I	Power Plastic Through Hole ⁽²⁾⁽⁸⁾	TO-220AB	150	0.77	10	175
20	VS-20CTQ150-N3	I	Power Plastic Through Hole ⁽²⁾⁽⁷⁾	TO-220AB	150	0.77	10	175
20	VS-20CTQ045PBF	I	Power Plastic Through Hole ⁽²⁾⁽⁸⁾	TO-220AB	35-40-45	0.68	10	175
20	VS-20CTQ045-N3	I	Power Plastic Through Hole ⁽²⁾⁽⁷⁾	TO-220AB	35-40-45	0.68	10	175
20	VS-20TQ045PBF	I	Power Plastic Through Hole ⁽¹⁾⁽⁸⁾	TO-220AC	35-40-45	0.51	10	150
20	VS-20TQ045-N3	I	Power Plastic Through Hole ⁽¹⁾⁽⁷⁾	TO-220AC	35-40-45	0.51	10	150
20	VS-MBR2045CTPBF	I	Power Plastic Through Hole ⁽²⁾⁽⁸⁾	TO-220AB	35-40-45	0.72	10	150
20	VS-MBR2045CT-N3	I	Power Plastic Through Hole ⁽²⁾⁽⁷⁾	TO-220AB	35-40-45	0.72	10	150
20	VS-MBR20100CTK-N3	I	Power Plastic Through Hole ⁽²⁾⁽⁷⁾	TO-220AB	60-80-100	0.65	10	175
25	VS-25CTQ045SxPBF	I	Power Plastic SMD ⁽²⁾⁽³⁾⁽⁶⁾	TO-263AB (D ² PAK)	35-40-45	0.64	12.5	150
25	VS-MBRB2545CTxPBF	I	Power Plastic SMD ⁽²⁾⁽³⁾⁽⁶⁾	TO-263AB (D ² PAK)	45	0.73	12.5	150
25	VS-MBR2545CT-1PBF	I	Power Plastic Through Hole ⁽²⁾⁽⁶⁾	TO-262 (I ² PAK)	35-40-45	0.73	12.5	150
25	VS-25CTQ045-1PBF	I	Power Plastic Through Hole ⁽²⁾⁽⁶⁾	TO-262 (I ² PAK)	35-40-45	0.64	12.5	150
25	VS-25CTQ045PBF	I	Power Plastic Through Hole ⁽²⁾⁽⁸⁾	TO-220AB	35-40-45	0.64	12.5	150
25	VS-25CTQ045-N3	I	Power Plastic Through Hole ⁽²⁾⁽⁷⁾	TO-220AB	35-40-45	0.64	12.5	150
25	VS-MBR2545CTPBF	I	Power Plastic Through Hole ⁽²⁾⁽⁸⁾	TO-220AB	45	0.73	12.5	150
25	VS-MBR2545CT-N3	I	Power Plastic Through Hole ⁽²⁾⁽⁷⁾	TO-220AB	45	0.73	12.5	150
30	VS-32CTQ030SxPBF	I	Power Plastic SMD ⁽²⁾⁽³⁾⁽⁶⁾	TO-263AB (D ² PAK)	30	0.53	15	150
30	VS-MBRB3030CTLxPBF	I	Power Plastic SMD ⁽²⁾⁽³⁾⁽⁶⁾	TO-263AB (D ² PAK)	30	0.51	15	150
30	VS-30CTQ045SxPBF	I	Power Plastic SMD ⁽²⁾⁽³⁾⁽⁶⁾	TO-263AB (D ² PAK)	45	0.70	15	175
30	VS-MBRB3045CTxPBF	I	Power Plastic SMD ⁽²⁾⁽³⁾⁽⁶⁾	TO-263AB (D ² PAK)	45	0.72	15	150

Note:

1. Singled die device
2. Dual center-tapped device (V_F limit at I_F is per diode)
3. x designates tube or tape&reel version on SMD products
none = tube
TR = tape and reel centered (for DPAK only)
TRL = tape and reel left oriented
TRR = tape and reel right oriented

4. Source: I = formerly International Rectifier Diode unit
5. Bold text indicates new product
6. Halogen free mould compound and RoHs Compliant
7. Halogen free mould compound and RoHs compliant and totally lead free
8. RoHs compliant and totally lead free
9. RoHs compliant



RECTIFIERS

Schottky Rectifiers



HPS GEN 2.x (Planar Technology), continued

I _{F(AV)} (A)	Device ⁽⁵⁾	Source ⁽⁴⁾	Package		V _(BR) Range (V)	Max V _F at I _F		T _j Max (°C)
			Family ⁽³⁾	Type		(V)	(A)	
30	VS-30CTQ060SxPBF	I	Power Plastic SMD ⁽²⁾⁽³⁾⁽⁶⁾	TO-263AB (D ² PAK)	60	0.71	15	150
30	VS-30CTQ100SxPBF	I	Power Plastic SMD ⁽²⁾⁽³⁾⁽⁶⁾	TO-263AB (D ² PAK)	80-100	0.82	15	175
30	VS-30L30CT-1PBF	I	Power Plastic Through Hole ⁽²⁾⁽⁶⁾	TO-262 (I ² PAK)	30	0.50	15	150
30	VS-32CTQ030-1PBF	I	Power Plastic Through Hole ⁽²⁾⁽⁶⁾	TO-262 (I ² PAK)	30	0.53	15	150
30	VS-30CTQ045-1PBF	I	Power Plastic Through Hole ⁽²⁾⁽⁶⁾	TO-262 (I ² PAK)	45	0.70	15	175
30	VS-MBR3045CT-1PBF	I	Power Plastic Through Hole ⁽²⁾⁽⁶⁾	TO-262 (I ² PAK)	45	0.72	15	150
30	VS-30CTQ060-1PBF	I	Power Plastic Through Hole ⁽²⁾⁽⁶⁾	TO-262 (I ² PAK)	60	0.71	15	150
30	VS-30CTQ100-1PBF	I	Power Plastic Through Hole ⁽²⁾⁽⁶⁾	TO-262 (I ² PAK)	80-100	0.82	15	175
30	VS-30L30CTPBF	I	Power Plastic Through Hole ⁽²⁾⁽⁸⁾	TO-220AB	30	0.50	15	150
30	VS-30L30CT-N3	I	Power Plastic Through Hole⁽²⁾⁽⁷⁾	TO-220AB	30	0.50	15	150
30	VS-MBR3045CTPBF	I	Power Plastic Through Hole ⁽²⁾⁽⁸⁾	TO-220AB	45	0.72	15	150
30	VS-MBR3045CT-N3	I	Power Plastic Through Hole⁽²⁾⁽⁷⁾	TO-220AB	45	0.72	15	150
30	VS-32CTQ030PBF	I	Power Plastic Through Hole ⁽²⁾⁽⁸⁾	TO-220AB	25-30	0.53	15	150
30	VS-32CTQ030-N3	I	Power Plastic Through Hole⁽²⁾⁽⁷⁾	TO-220AB	25-30	0.53	15	150
30	VS-30CTQ045PBF	I	Power Plastic Through Hole ⁽²⁾⁽⁸⁾	TO-220AB	35-40-45	0.70	15	175
30	VS-30CTQ045-N3	I	Power Plastic Through Hole ⁽²⁾⁽⁷⁾	TO-220AB	35-40-45	0.70	15	175
30	VS-30CTQ060PBF	I	Power Plastic Through Hole ⁽²⁾⁽⁸⁾	TO-220AB	50-60	0.71	15	150
30	VS-30CTQ060-N3	I	Power Plastic Through Hole⁽²⁾⁽⁷⁾	TO-220AB	50-60	0.71	15	150
30	VS-30CTQ100PBF	I	Power Plastic Through Hole ⁽²⁾⁽⁸⁾	TO-220AB	80-100	0.65	15	175
30	VS-30CTQ100-N3	I	Power Plastic Through Hole⁽²⁾⁽⁷⁾	TO-220AB	80-100	0.65	15	175
30	VS-30CPQ150PBF	I	Power Plastic Through Hole ⁽²⁾⁽⁸⁾	TO-247AC	150	0.93	15	175
30	VS-30CPQ150-N3	I	Power Plastic Through Hole⁽²⁾⁽⁷⁾	TO-247AC	150	0.93	15	175
30	VS-30CPQ045PBF	I	Power Plastic Through Hole ⁽²⁾⁽⁸⁾	TO-247AC	35-40-45	0.64	15	150
30	VS-30CPQ045-N3	I	Power Plastic Through Hole⁽²⁾⁽⁷⁾	TO-247AC	35-40-45	0.64	15	150
30	VS-MBR3045WTPBF	I	Power Plastic Through Hole ⁽²⁾⁽⁸⁾	TO-247AC	35-40-45	0.72	30	150
30	VS-MBR3045WT-N3	I	Power Plastic Through Hole⁽²⁾⁽⁷⁾	TO-247AC	35-40-45	0.72	30	150
30	VS-30CPQ060PBF	I	Power Plastic Through Hole ⁽²⁾⁽⁸⁾	TO-247AC	50-60	0.70	15	150
30	VS-30CPQ060-N3	I	Power Plastic Through Hole⁽²⁾⁽⁷⁾	TO-247AC	50-60	0.70	15	150
30	VS-30CPQ100PBF	I	Power Plastic Through Hole ⁽²⁾⁽⁸⁾	TO-247AC	80-90-100	0.81	15	175
30	VS-30CPQ100-N3	I	Power Plastic Through Hole⁽²⁾⁽⁷⁾	TO-247AC	80-90-100	0.81	15	175
40	VS-40L15CTSxPBF	I	Power Plastic SMD ⁽²⁾⁽³⁾⁽⁶⁾	TO-263AB (D ² PAK)	15	0.50	20	125
40	VS-47CTQ020SxPBF	I	Power Plastic SMD ⁽²⁾⁽³⁾⁽⁶⁾	TO-263AB (D ² PAK)	20	0.42	20	150
40	VS-42CTQ030SxPBF	I	Power Plastic SMD ⁽²⁾⁽³⁾⁽⁶⁾	TO-263AB (D ² PAK)	30	0.51	20	150
40	VS-40CTQ045SxPBF	I	Power Plastic SMD ⁽²⁾⁽³⁾⁽⁶⁾	TO-263AB (D ² PAK)	45	0.67	20	150

Note:

1. Singled die device
2. Dual center-tapped device (V_F limit at I_F is per diode)
3. x designates tube or tape&reel version on SMD products
none = tube
TR = tape and reel centered (for DPAK only)
TRL = tape and reel left oriented
TRR = tape and reel right oriented

4. Source: I = formerly International Rectifier Diode unit
5. Bold text indicates new product
6. Halogen free mould compound and RoHs Compliant
7. Halogen free mould compound and RoHs compliant and totally lead free
8. RoHs compliant and totally lead free
9. RoHs compliant



RECTIFIERS

Schottky Rectifiers



HPS GEN 2.x (Planar Technology), continued

I _{F(AV)} (A)	Device ⁽⁵⁾	Source ⁽⁴⁾	Package		V _(BR) Range (V)	Max V _F at I _F		T _J Max (°C)
			Family ⁽³⁾	Type		(V)	(A)	
40	VS-MBRB4045CTxPBF	I	Power Plastic SMD ⁽²⁾⁽³⁾⁽⁶⁾	TO-263AB (D ² PAK)	45	0.75	20	150
40	VS-48CTQ060SxPBF	I	Power Plastic SMD ⁽²⁾⁽³⁾⁽⁶⁾	TO-263AB (D ² PAK)	60	0.75	20	150
40	VS-40CTQ150SxPBF	I	Power Plastic SMD ⁽²⁾⁽³⁾⁽⁶⁾	TO-263AB (D ² PAK)	150	0.85	20	175
40	VS-43CTQ100SxPBF	I	Power Plastic SMD ⁽²⁾⁽³⁾⁽⁶⁾	TO-263AB (D ² PAK)	80-100	0.81	20	175
40	VS-40L15CT-1PBF	I	Power Plastic Through Hole ⁽²⁾⁽⁶⁾	TO-262 (I ² PAK)	15	0.50	20	125
40	VS-47CTQ020-1PBF	I	Power Plastic Through Hole ⁽²⁾⁽⁶⁾	TO-262 (I ² PAK)	20	0.42	20	150
40	VS-42CTQ030-1PBF	I	Power Plastic Through Hole ⁽²⁾⁽⁶⁾	TO-262 (I ² PAK)	30	0.51	20	150
40	VS-40CTQ045-1PBF	I	Power Plastic Through Hole ⁽²⁾⁽⁶⁾	TO-262 (I ² PAK)	45	0.67	20	150
40	VS-MBR4045CT-1PBF	I	Power Plastic Through Hole ⁽²⁾⁽⁶⁾	TO-262 (I ² PAK)	45	0.75	20	150
40	VS-48CTQ060-1PBF	I	Power Plastic Through Hole ⁽²⁾⁽⁶⁾	TO-262 (I ² PAK)	60	0.75	20	150
40	VS-40CTQ150-1PBF	I	Power Plastic Through Hole ⁽²⁾⁽⁶⁾	TO-262 (I ² PAK)	150	0.85	20	175
40	VS-43CTQ100-1PBF	I	Power Plastic Through Hole ⁽²⁾⁽⁶⁾	TO-262 (I ² PAK)	80-100	0.81	20	175
40	VS-40L15CTPBF	I	Power Plastic Through Hole ⁽²⁾⁽⁸⁾	TO-220AB	15	0.50	20	125
40	VS-40L15CT-N3	I	Power Plastic Through Hole⁽²⁾⁽⁷⁾	TO-220AB	15	0.5	20	125
40	VS-47CTQ020PBF	I	Power Plastic Through Hole ⁽²⁾⁽⁸⁾	TO-220AB	20	0.42	20	150
40	VS-47CTQ020-N3	I	Power Plastic Through Hole⁽²⁾⁽⁷⁾	TO-220AB	20	0.42	20	150
40	VS-42CTQ030PBF	I	Power Plastic Through Hole ⁽²⁾⁽⁸⁾	TO-220AB	30	0.51	20	150
40	VS-42CTQ030-N3	I	Power Plastic Through Hole⁽²⁾⁽⁷⁾	TO-220AB	30	0.51	20	150
40	VS-40CTQ045PBF	I	Power Plastic Through Hole ⁽²⁾⁽⁸⁾	TO-220AB	45	0.67	20	150
40	VS-40CTQ045-N3	I	Power Plastic Through Hole⁽²⁾⁽⁷⁾	TO-220AB	45	0.67	20	150
40	VS-MBR4045CTPBF	I	Power Plastic Through Hole ⁽²⁾⁽⁸⁾	TO-220AC	45	0.75	20	150
40	VS-MBR4045CT-N3	I	Power Plastic Through Hole⁽²⁾⁽⁷⁾	TO-220AC	45	0.75	20	150
40	VS-48CTQ060PBF	I	Power Plastic Through Hole ⁽²⁾⁽⁸⁾	TO-220AB	60	0.75	20	150
40	VS-48CTQ060-N3	I	Power Plastic Through Hole⁽²⁾⁽⁷⁾	TO-220AB	60	0.75	20	150
40	VS-43CTQ100PBF	I	Power Plastic Through Hole ⁽²⁾⁽⁸⁾	TO-220AB	100	0.81	20	175
40	VS-43CTQ100-N3	I	Power Plastic Through Hole⁽²⁾⁽⁷⁾	TO-220AB	100	0.81	20	175
40	VS-40CTQ150PBF	I	Power Plastic Through Hole ⁽²⁾⁽⁸⁾	TO-220AB	150	0.85	20	175
40	VS-40CTQ150-N3	I	Power Plastic Through Hole⁽²⁾⁽⁷⁾	TO-220AB	150	0.85	20	175
40	VS-40L15CWPBF	I	Power Plastic Through Hole ⁽²⁾⁽⁸⁾	TO-247AC	15	0.50	40	125
40	VS-40L15CW-N3	I	Power Plastic Through Hole⁽²⁾⁽⁷⁾	TO-247AC	15	0.50	40	125
40	VS-MBR40L15CWPBF	I	Power Plastic Through Hole ⁽²⁾⁽⁸⁾	TO-247AC	15	0.50	20	125
40	VS-MBR40L15CW-N3	I	Power Plastic Through Hole⁽²⁾⁽⁷⁾	TO-247AC	15	0.50	20	125
40	VS-40L40CWPBF	I	Power Plastic Through Hole ⁽²⁾⁽⁸⁾	TO-247AC	40	0.70	20	150
40	VS-40L40CW-N3	I	Power Plastic Through Hole⁽²⁾⁽⁷⁾	TO-247AC	40	0.70	20	150

Note:

1. Singled die device
2. Dual center-tapped device (V_F limit at I_F is per diode)
3. x designates tube or tape&reel version on SMD products
none = tube
TR = tape and reel centered (for DPAK only)
TRL = tape and reel left oriented
TRR = tape and reel right oriented

4. Source: I = formerly International Rectifier Diode unit
5. Bold text indicates new product
6. Halogen free mould compound and RoHs Compliant
7. Halogen free mould compound and RoHs compliant and totally lead free
8. RoHs compliant and totally lead free
9. RoHs compliant



RECTIFIERS

Schottky Rectifiers



HPS GEN 2.x (Planar Technology), continued

I _{F(AV)} (A)	Device ⁽⁵⁾	Source ⁽⁴⁾	Package		V _(BR) Range (V)	Max V _F at I _F		T _J Max (°C)
			Family ⁽³⁾	Type		(V)	(A)	
40	VS-40L45CWPBF	I	Power Plastic Through Hole ⁽²⁾⁽⁸⁾	TO-247AC	45	0.70	20	150
40	VS-40L45CW-N3	I	Power Plastic Through Hole⁽²⁾⁽⁷⁾	TO-247AC	45	0.70	20	150
40	VS-MBR4045WTPBF	I	Power Plastic Through Hole ⁽²⁾⁽⁸⁾	TO-247AC	45	0.72	40	150
40	VS-MBR4045WT-N3	I	Power Plastic Through Hole⁽²⁾⁽⁷⁾	TO-247AC	45	0.72	40	150
40	VS-MBR4060WTPBF	I	Power Plastic Through Hole ⁽²⁾⁽⁸⁾	TO-247AC	60	0.62	40	150
40	VS-MBR4060WT-N3	I	Power Plastic Through Hole⁽²⁾⁽⁷⁾	TO-247AC	60	0.62	40	150
40	VS-40CPQ045PBF	I	Power Plastic Through Hole ⁽²⁾⁽⁸⁾	TO-247AC	35-40-45	0.56	20	150
40	VS-40CPQ045-N3	I	Power Plastic Through Hole⁽²⁾⁽⁷⁾	TO-247AC	35-40-45	0.56	20	150
40	VS-40CPQ060PBF	I	Power Plastic Through Hole ⁽²⁾⁽⁸⁾	TO-247AC	50-60	0.64	20	150
40	VS-40CPQ060-N3	I	Power Plastic Through Hole⁽²⁾⁽⁷⁾	TO-247AC	50-60	0.64	20	150
40	VS-40CPQ100PBF	I	Power Plastic Through Hole ⁽²⁾⁽⁸⁾	TO-247AC	80-100	0.75	20	175
40	VS-40CPQ100-N3	I	Power Plastic Through Hole⁽²⁾⁽⁷⁾	TO-247AC	80-100	0.75	20	175
50	VS-52CPQ030PBF	I	Power Plastic Through Hole ⁽²⁾⁽⁸⁾	TO-247AC	30	0.49	25	150
50	VS-52CPQ030-N3	I	Power Plastic Through Hole⁽²⁾⁽⁷⁾	TO-247AC	30	0.49	25	150
60	VS-62CTQ030PBF	I	Power Plastic Through Hole ⁽²⁾⁽⁸⁾	TO-220AC	30	0.59	30	150
60	VS-62CTQ030-N3	I	Power Plastic Through Hole⁽²⁾⁽⁷⁾	TO-220AC	30	0.59	30	150
60	VS-63CTQ100PBF	I	Power Plastic Through Hole ⁽²⁾⁽⁸⁾	TO-220AB	100	0.83	30	175
60	VS-63CTQ100-N3	I	Power Plastic Through Hole⁽²⁾⁽⁷⁾	TO-220AB	100	0.83	30	175
60	VS-60CTQ150PBF	I	Power Plastic Through Hole ⁽²⁾⁽⁸⁾	TO-220AB	150	0.87	30	175
60	VS-60CTQ150-N3	I	Power Plastic Through Hole⁽²⁾⁽⁷⁾	TO-220AB	150	0.87	30	175
60	VS-60CTQ045PBF	I	Power Plastic Through Hole ⁽²⁾⁽⁸⁾	TO-220AC	35-40-45	0.75	30	150
60	VS-60CTQ045-N3	I	Power Plastic Through Hole⁽²⁾⁽⁷⁾	TO-220AC	35-40-45	0.75	30	150
60	VS-61CTQ045PBF	I	Power Plastic Through Hole ⁽²⁾⁽⁸⁾	TO-220AC	35-40-45	0.74	30	175
60	VS-61CTQ045-N3	I	Power Plastic Through Hole⁽²⁾⁽⁷⁾	TO-220AC	35-40-45	0.74	30	175
60	VS-MBR6045WTPBF	I	Power Plastic Through Hole ⁽²⁾⁽⁸⁾	TO-247AC	45	0.55	30	150
60	VS-MBR6045WT-N3	I	Power Plastic Through Hole⁽²⁾⁽⁷⁾	TO-247AC	45	0.55	30	150
60	VS-63CPQ100PBF	I	Power Plastic Through Hole ⁽²⁾⁽⁸⁾	TO-247AC	100	0.76	30	175
60	VS-63CPQ100-N3	I	Power Plastic Through Hole⁽²⁾⁽⁷⁾	TO-247AC	100	0.76	30	175
60	VS-60CPQ150PBF	I	Power Plastic Through Hole ⁽²⁾⁽⁸⁾	TO-247AC	150	0.77	30	175
60	VS-60CPQ150-N3	I	Power Plastic Through Hole⁽²⁾⁽⁷⁾	TO-247AC	150	0.77	30	175
65	VS-65PQ015PBF	I	Power Plastic Through Hole ⁽¹⁾⁽⁸⁾	TO-247AC (mod)	15	0.46	65	125
65	VS-65PQ015-N3	I	Power Plastic Through Hole⁽¹⁾⁽⁷⁾	TO-247AC (mod)	15	0.46	65	125
70	VS.72CPQ030PBF	I	Power Plastic Through Hole ⁽²⁾⁽⁸⁾	TO-247AC	30	0.58	35	150
70	VS.72CPQ030-N3	I	Power Plastic Through Hole⁽²⁾⁽⁷⁾	TO-247AC	30	0.58	35	150

Note:

1. Singled die device
2. Dual center-tapped device (V_F limit at I_F is per diode)
3. x designates tube or tape&reel version on SMD products
none = tube
TR = tape and reel centered (for DPAK only)
TRL = tape and reel left oriented
TRR = tape and reel right oriented

4. Source: I = formerly International Rectifier Diode unit
5. Bold text indicates new product
6. Halogen free mould compound and RoHs Compliant
7. Halogen free mould compound and RoHs compliant and totally lead free
8. RoHs compliant and totally lead free
9. RoHs compliant



RECTIFIERS

Schottky Rectifiers



HPS GEN 2.x (Planar Technology), continued

I _{F(AV)} (A)	Device ⁽⁵⁾	Source ⁽⁴⁾	Package		V _(BR) Range (V)	Max V _F at I _F		T _J Max (°C)
			Family ⁽³⁾	Type		(V)	(A)	
80	VS-80CPQ020PBF	I	Power Plastic Through Hole ⁽²⁾⁽⁸⁾	TO-247AC	20	0.46	40	150
80	VS-80CPQ020-N3	I	Power Plastic Through Hole⁽²⁾⁽⁷⁾	TO-247AC	20	0.46	40	150
80	VS-80CPQ150PBF	I	Power Plastic Through Hole ⁽²⁾⁽⁸⁾	TO-247AC	150	0.85	40	175
80	VS-80CPQ150-N3	I	Power Plastic Through Hole⁽²⁾⁽⁷⁾	TO-247AC	150	0.85	40	175
80	VS-85CNQ015APBF	I	Power Plastic Through Hole ⁽²⁾⁽⁹⁾	D61-8	15	0.42	40	125
80	VS-87CNQ020APBF	I	Power Plastic Through Hole ⁽²⁾⁽⁹⁾	D61-8	20	0.39	40	150
80	VS-82CNQ030APBF	I	Power Plastic Through Hole ⁽²⁾⁽⁹⁾	D61-8	30	0.47	40	150
80	VS-88CNQ060APBF	I	Power Plastic Through Hole ⁽²⁾⁽⁹⁾	D61-8	60	0.67	40	150
80	VS-80CNQ045APBF	I	Power Plastic Through Hole ⁽²⁾⁽⁹⁾	D61-8	40-45	0.61	40	150
80	VS-81CNQ045APBF	I	Power Plastic Through Hole ⁽²⁾⁽⁹⁾	D61-8	40-45	0.66	40	175
80	VS-83CNQ100APBF	I	Power Plastic Through Hole ⁽²⁾⁽⁹⁾	D61-8	80-100	0.82	40	175
80	VS-85CNQ015ASLPBF	I	Power Plastic Through Hole ⁽²⁾⁽⁹⁾	D61-8-SL	15	0.42	40	125
80	VS-87CNQ020ASLPBF	I	Power Plastic Through Hole ⁽²⁾⁽⁹⁾	D61-8-SL	20	0.39	40	150
80	VS-82CNQ030ASLPBF	I	Power Plastic Through Hole ⁽²⁾⁽⁹⁾	D61-8-SL	30	0.47	40	150
80	VS-88CNQ060ASLPBF	I	Power Plastic Through Hole ⁽²⁾⁽⁹⁾	D61-8-SL	60	0.67	40	150
80	VS-80CNQ045ASLPBF	I	Power Plastic Through Hole ⁽²⁾⁽⁹⁾	D61-8-SL	35-40-45	0.61	40	150
80	VS-81CNQ045ASLPBF	I	Power Plastic Through Hole ⁽²⁾⁽⁹⁾	D61-8-SL	35-40-45	0.66	40	175
80	VS-83CNQ100ASLPBF	I	Power Plastic Through Hole ⁽²⁾⁽⁹⁾	D61-8-SL	80-100	0.82	40	175
80	VS-85CNQ015ASMPBF	I	Power Plastic SMD ⁽²⁾⁽⁹⁾	D61-8-SM	15	0.42	40	125
80	VS-87CNQ020ASMPBF	I	Power Plastic SMD ⁽²⁾⁽⁹⁾	D61-8-SM	20	0.39	40	150
80	VS-82CNQ030ASMPBF	I	Power Plastic SMD ⁽²⁾⁽⁹⁾	D61-8-SM	30	0.47	40	150
80	VS-88CNQ060ASMPBF	I	Power Plastic SMD ⁽²⁾⁽⁹⁾	D61-8-SM	60	0.67	40	150
80	VS-80CNQ045ASMPBF	I	Power Plastic SMD ⁽²⁾⁽⁹⁾	D61-8-SM	35-40-45	0.61	40	150
80	VS-81CNQ045ASMPBF	I	Power Plastic SMD ⁽²⁾⁽⁹⁾	D61-8-SM	35-40-45	0.66	40	175
80	VS-83CNQ100ASMPBF	I	Power Plastic SMD ⁽²⁾⁽⁹⁾	D61-8-SM	80-100	0.82	40	175
100	VS-100BGQ015	I	Power Plastic Through Hole ⁽¹⁾⁽⁸⁾	PowerTab™	15	0.42	100	125
100	VS-100BGQ030	I	Power Plastic Through Hole ⁽¹⁾⁽⁸⁾	PowerTab™	30	0.51	100	150
100	VS-100BGQ045	I	Power Plastic Through Hole ⁽¹⁾⁽⁸⁾	PowerTab™	45	0.68	100	150
100	VS-100BGQ100	I	Power Plastic Through Hole ⁽¹⁾⁽⁸⁾	PowerTab™	100	0.77	100	175
110	VS-115CNQ015APBF	I	Power Plastic Through Hole ⁽²⁾⁽⁹⁾	D61-8	15	0.43	55	125
110	VS-112CNQ030APBF	I	Power Plastic Through Hole ⁽²⁾⁽⁹⁾	D61-8	30	0.51	55	150
110	VS-110CNQ045APBF	I	Power Plastic Through Hole ⁽²⁾⁽⁹⁾	D61-8	45	0.69	55	150
110	VS-111CNQ045APBF	I	Power Plastic Through Hole ⁽²⁾⁽⁹⁾	D61-8	45	0.69	55	175
110	VS-113CNQ100APBF	I	Power Plastic Through Hole ⁽²⁾⁽⁹⁾	D61-8	100	0.79	33	175

Note:

1. Singled die device
2. Dual center-tapped device (V_F limit at I_F is per diode)
3. x designates tube or tape&reel version on SMD products
none = tube
TR = tape and reel centered (for DPAK only)
TRL = tape and reel left oriented
TRR = tape and reel right oriented

4. Source: I = formerly International Rectifier Diode unit
5. Bold text indicates new product
6. Halogen free mould compound and RoHs Compliant
7. Halogen free mould compound and RoHs compliant and totally lead free
8. RoHs compliant and totally lead free
9. RoHs compliant



RECTIFIERS

Schottky Rectifiers



HPS GEN 2.x (Planar Technology), continued

$I_{F(AV)}$ (A)	Device ⁽⁵⁾	Source ⁽⁴⁾	Package		$V_{(BR)}$ Range (V)	Max V_F at I_F		T_J Max (°C)
			Family ⁽³⁾	Type		(V)	(A)	
110	VS-115CNQ015ASLPBF	I	Power Plastic Through Hole ⁽²⁾⁽⁹⁾	D61-8-SL	15	0.43	55	125
110	VS-112CNQ030ASLPBF	I	Power Plastic Through Hole ⁽²⁾⁽⁹⁾	D61-8-SL	30	0.51	55	150
110	VS-111CNQ045ASLPBF	I	Power Plastic Through Hole ⁽²⁾⁽⁹⁾	D61-8-SL	45	0.69	55	175
110	VS-113CNQ100ASLPBF	I	Power Plastic Through Hole ⁽²⁾⁽⁹⁾	D61-8-SL	100	0.79	55	175
110	VS-110CNQ045ASLPBF	I	Power Plastic Through Hole ⁽²⁾⁽⁹⁾	D61-8-SL	40-45	0.69	55	150
110	VS-115CNQ015ASMPBF	I	Power Plastic SMD ⁽²⁾⁽⁹⁾	D61-8-SM	15	0.43	55	125
110	VS-112CNQ030ASMPBF	I	Power Plastic SMD ⁽²⁾⁽⁹⁾	D61-8-SM	30	0.51	55	150
110	VS-110CNQ045ASMPBF	I	Power Plastic SMD ⁽²⁾⁽⁹⁾	D61-8-SM	45	0.69	55	150
110	VS-111CNQ045ASMPBF	I	Power Plastic SMD ⁽²⁾⁽⁹⁾	D61-8-SM	45	0.69	55	175
110	VS-113CNQ100ASMPBF	I	Power Plastic SMD ⁽²⁾⁽⁹⁾	D61-8-SM	100	0.79	55	175
175	VS-175BGQ030	I	Power Plastic Through Hole ⁽¹⁾⁽⁸⁾	PowerTab™	30	0.49	175	150
175	VS-175BGQ045	I	Power Plastic Through Hole ⁽¹⁾⁽⁸⁾	PowerTab™	45	0.64	175	150

Note:

1. Singled die device
2. Dual center-tapped device (V_F limit at I_F is per diode)
3. x designates tube or tape&reel version on SMD products
none = tube
TR = tape and reel centered (for DPAK only)
TRL = tape and reel left oriented
TRR = tape and reel right oriented

4. Source: I = formerly International Rectifier Diode unit
5. Bold text indicates new product
6. Halogen free mould compound and RoHs Compliant
7. Halogen free mould compound and RoHs compliant and totally lead free
8. RoHs compliant and totally lead free
9. RoHs compliant



RECTIFIERS

Ultrafast Recovery Rectifiers



Ultrafast Recovery Rectifiers have very fast reverse recovery times (as low as 15 ns) and voltage levels as high as 1500 V. They are ideally suited for very high frequency switching power supplies, inverters, and freewheeling diodes. Both platinum-doped types with excellent high-temperature leakage current and gold-doped types for soft reverse recovery with excellent recovery temperature stability are offered.

$I_{F(AV)}$ (A)	Device ⁽¹⁾	Package		$V_{(BR)}$ Range (V)	Max V_F at I_F		T_{rr} (ns)
		Family ⁽³⁾	Type		(V)	(A)	
0.6	UG06A to UG06D	Plastic Axial ⁽²⁾	MPG06	50 - 200	0.95	0.6	15
1.0	ES1A to ES1D	Plastic SMD ⁽²⁾	DO-214AC (SMA)	50 - 200	0.92	1.0	15
1.0	ES1PB, ES1PC and ES1PD	Plastic SMD ⁽²⁾	DO-220AA (SMP)	100 - 200	0.865 / 0.92	0.6 / 1.0	15
1.0	ESH1B, ESH1C and ESH1D	Plastic SMD ⁽²⁾	DO-214AC (SMA)	100 - 200	0.87 / 0.90	0.7 / 1.0	25
1.0	ESH1PB, ESH1PC and ESH1PD	Plastic SMD ⁽²⁾	DO-220AA (SMP)	100 - 200	0.86 / 0.90	0.7 / 1.0	25
1.0	MUH1PB, MUH1PC and MUH1PD	Plastic SMD ⁽⁴⁾	Micro SMP	100 - 200	1.05	1.0	25
1.0	MUR120	Plastic Axial ⁽²⁾	DO-204AC (DO-15)	200	0.88	1.0	25
1.0	MUR140 and MUR160	Plastic Axial ⁽²⁾	DO-204AC (DO-15)	400 - 600	1.25	1.0	50
1.0	MURS120	Plastic SMD ⁽²⁾	DO-214AA (SMB)	200	0.88	1.0	25
1.0	MURS140 and MURS160	Plastic SMD ⁽²⁾	DO-214AA (SMB)	400 - 600	1.25	1.0	50
1.0	U1B, U1C and U1D	Plastic SMD ⁽⁴⁾	DO-214AC (SMA)	100 - 200	0.92	1.0	15
1.0	UF4001 to UF4007	Plastic Axial ⁽²⁾	DO-204AL (DO-41)	50 - 1000	1.0 / 1.7	1.0	50 / 75
1.0	UG1A to UG1D	Plastic Axial ⁽²⁾	DO-204AL (DO-41)	50 - 200	0.95	1.0	15
1.0	UH1B, UH1C and UH1D	Plastic SMD ⁽⁴⁾	DO-214AC (SMA)	100 - 200	1.05	1.0	25
1.0	UH1PB, UH1PC and UH1PD	Plastic SMD ⁽⁴⁾	DO-220AA (SMP)	100 - 200	1.05	1.0	25
1.0	US1A to US1M	Plastic SMD ⁽²⁾	DO-214AC (SMA)	50 - 1000	1.0 / 1.7	1.0	50 / 75
1.2	ES07B	Plastic SMD ⁽²⁾	DO-219AB (SMF)	100	0.98	1.0	25
1.2	ES07D	Plastic SMD ⁽²⁾	DO-219AB (SMF)	200	0.98	1.0	25
1.5	BYG20D to BYG20J	Plastic SMD ⁽²⁾	DO-214AC (SMA)	200 - 600	1.30	1.0	75
1.5	BYG23M	Plastic SMD ⁽²⁾	DO-214AC (SMA)	1000	1.70	1.0	75
2.0	BYG22A to BYG22D	Plastic SMD ⁽²⁾	DO-214AC (SMA)	50 - 200	1.10	2.0	25
2.0	ES2A to ES2D	Plastic SMD ⁽²⁾	DO-214AA (SMB)	50 - 200	0.90	2.0	20
2.0	ES2F and ES2G	Plastic SMD ⁽²⁾	DO-214AA (SMB)	300 - 400	1.10	2.0	35
2.0	ESH2B, ESH2C and ESH2D	Plastic SMD ⁽²⁾	DO-214AA (SMB)	100 - 200	0.93	2.0	25
2.0	ESH2PB, ESH2PC and ESH2PD	Plastic SMD ⁽²⁾	DO-220AA (SMP)	100 - 200	0.98	2.0	25
2.0	MURS240 and MURS260	Plastic SMD ⁽²⁾	DO-214AA (SMB)	400 - 600	1.45	2.0	50
2.0	SBYV27-50 to SBYV27-200	Plastic Axial ⁽²⁾	DO-204AC (DO-15)	50 - 200	1.07	3.0	15
2.0	U2B, U2C and U2D	Plastic Axial ⁽⁴⁾	DO-214AA (SMB)	100 - 200	0.90	2.0	20
2.0	UG2A to UG2D	Plastic Axial ⁽²⁾	DO-204AC (DO-15)	50 - 200	0.95	2.0	15
2.0	UG2F and UG2G	Plastic Axial ⁽²⁾	DO-204AC (DO-15)	300 - 400	1.10	2.0	35
2.0	UH2B, UH2C and UH2D	Plastic Axial ⁽⁴⁾	DO-214AA (SMB)	100 - 200	1.05	2.0	25
2.0	USB260	Plastic SMD ⁽²⁾	DO-214AA (SMB)	600	1.60	2.0	30
3.0	31GF4	Plastic Axial ⁽²⁾	DO-201AD	400	1.25	3.0	30
3.0	31GF6	Plastic Axial ⁽²⁾	DO-201AD	600	1.60	3.0	30

Note:

1. Bold text indicates new product
2. Glass passivated die

3. Dual center-tapped device (V_F limit at I_F is per diode)

4. Oxide planar die



RECTIFIERS

Ultrafast Recovery Rectifiers



Ultrafast Recovery Rectifiers, continued

I _{F(AV)} (A)	Device ⁽¹⁾	Package		V _(BR) Range (V)	Max V _F at I _F		T _{rr} (ns)
		Family ⁽³⁾	Type		(V)	(A)	
3.0	ES3A to ES3D	Plastic SMD ⁽²⁾	DO-214AB (SMC)	50 - 200	0.90	3.0	20
3.0	ES3F and ES3G	Plastic SMD ⁽²⁾	DO-214AB (SMC)	300 - 400	1.10	3.0	35
3.0	ESH3B, ESH3C and ESH3D	Plastic SMD ⁽²⁾	DO-214AB (SMC)	100 - 200	0.90	3.0	25
3.0	MURS320	Plastic SMD ⁽²⁾	DO-214AB (SMC)	200	0.88	3.0	25
3.0	MURS340 and MURS360	Plastic SMD ⁽²⁾	DO-214AB (SMC)	400 & 600	1.25 / 1.28	3.0 / 4.0	50
3.0	MURS340S and MURS360S	Plastic Axial⁽²⁾	DO-214AA (SMB)	400 & 600	1.45	3.0	50
3.0	U3B, U3C and U3D	Plastic SMD⁽⁴⁾	DO-214AB (SMC)	100 - 200	0.90	3.0	20
3.0	UF5400 to UF5408	Plastic Axial ⁽²⁾	DO-201AD	50 - 1000	1.0 / 1.7	3.0	50 / 75
3.0	UH3B, UH3C and UH3D	Plastic SMD⁽⁴⁾	DO-214AB (SMC)	100 - 200	1.05	3.0	25
3.5	SBYV28-50 to SBYV28-200	Plastic Axial ⁽²⁾	DO-201AD	50 - 200	1.10	3.5	20
4.0	MUR420	Plastic Axial ⁽²⁾	DO-201AD	200	0.89	4.0	25
4.0	MUR440 and MUR460	Plastic Axial ⁽²⁾	DO-201AD	400 - 600	1.28	4.0	50
4.0	UH4PBC, UH4PCC and UH4PDC	Plastic SMD⁽⁴⁾	TO-277A (SMPC)	100 - 200	1.05	2.0	25
4.0	UG4A to UG4D	Plastic Axial ⁽²⁾	DO-201AD	50 - 200	0.95	4.0	20
5.0	GUR5H60	Plastic Power Pack ⁽²⁾	TO-220AC	600	1.80	5.0	30
5.0	GURB5H60	Power Pack SMD ⁽²⁾	TO-263AB (D ² PAK)	600	1.80	5.0	30
5.0	GURF5H60	Isolated Power Pack ⁽²⁾	ITO-220AC	600	1.80	5.0	30
5.0	UG5HT and UG5JT	Plastic Power Pack ⁽²⁾	TO-220AC	500 - 600	1.75	5.0	25
5.0	UGB5HT and UGB5JT	Power Pack SMD ⁽²⁾	TO-263AB (D ² PAK)	500 - 600	1.75	5.0	25
5.0	UGF5HT and UGF5JT	Isolated Power Pack ⁽²⁾	ITO-220AC	500 - 600	1.75	5.0	25
6.0	FEP6AT to FEP6DT	Plastic Power Pack ⁽²⁾⁽³⁾	TO-220AB	50 - 200	0.98	3.0	35
6.0	FEPB6AT to FEPB6DT	Power Pack SMD ⁽²⁾⁽³⁾	TO-263AB (D ² PAK)	50 - 200	0.98	3.0	35
6.0	FEPF6AT to FEPF6DT	Isolated Power Pack ⁽²⁾⁽³⁾	ITO-220AB	50 - 200	0.98	3.0	35
6.0	UH6PD	Plastic SMD⁽⁴⁾	TO-277A (SMPC)	200	1.05	6.0	25
6.0	UH6PJ	Plastic SMD⁽⁴⁾	TO-277A (SMPC)	600	3.0	6.0	25
8.0	BYV29-300 and BYV29-400	Plastic Power Pack ⁽²⁾	TO-220AC	300 - 400	1.25	8.0	35
8.0	BYV29B-300 and BYV29B-400	Power Pack SMD ⁽²⁾	TO-263AB (D ² PAK)	300 - 400	1.25	8.0	35
8.0	BYV29F-300 and BYV29F-400	Isolated Power Pack ⁽²⁾	ITO-220AC	300 - 400	1.25	8.0	35
8.0	BYW29-50 to BYW29-200	Plastic Power Pack ⁽²⁾	TO-220AC	50 - 200	1.30	20	25
8.0	BYWB29-50 to BYWB29-200	Power Pack SMD ⁽²⁾	TO-263AB (D ² PAK)	50 - 200	1.30	20	25
8.0	BYWF29-50 to BYWF29-200	Isolated Power Pack ⁽²⁾	ITO-220AC	50 - 200	1.30	20	25
8.0	FES8AT to FES8JT	Plastic Power Pack ⁽²⁾	TO-220AC	50 - 600	0.95 / 1.3 / 1.5	8.0	35 / 50
8.0	FESB8AT to FESB8JT	Power Pack SMD ⁽²⁾	TO-263AB (D ² PAK)	50 - 600	0.95 / 1.3 / 1.5	8.0	35 / 50
8.0	FESF8AT to FESF8JT	Isolated Power Pack ⁽²⁾	ITO-220AC	50 - 600	0.95 / 1.3 / 1.5	8.0	35 / 50
8.0	U8BT to U8DT	Plastic Power Pack⁽⁴⁾	TO-220AC	100 - 200	1.02	8.0	20
8.0	UF8BT to UF8DT	Isolated Power Pack⁽⁴⁾	ITO-220AC	100 - 200	1.02	8.0	20
8.0	UB8BT to UB8DT	Power Pack SMD⁽⁴⁾	TO-263AB (D²PAK)	100 - 200	1.02	8.0	20

Note:

1. Bold text indicates new product
2. Glass passivated die

3. Dual center-tapped device (V_F limit at I_F is per diode)

4. Oxide planar die



RECTIFIERS

Ultrafast Recovery Rectifiers



Ultrafast Recovery Rectifiers, continued

I _{F(AV)} (A)	Device ⁽¹⁾	Package		V _(BR) Range (V)	Max V _F at I _F		T _{rr} (ns)
		Family ⁽³⁾	Type		(V)	(A)	
8.0	GI1401 to GI1404	Plastic Power Pack ⁽²⁾	T0-220AC	50 - 200	0.98	8.0	35
8.0	GIB1401 to GIB1404	Power Pack SMD ⁽²⁾	T0-263AB (D ² PAK)	50 - 200	0.98	8.0	35
8.0	UG8AT to UG8DT	Plastic Power Pack ⁽²⁾	T0-220AC	50 - 200	1.00	8.0	20
8.0	UGB8AT to UGB8DT	Power Pack SMD ⁽²⁾	T0-263AB (D ² PAK)	50 - 200	1.00	8.0	20
8.0	UGF8AT to UGF8DT	Isolated Power Pack ⁽²⁾	ITO-220AC	50 - 200	1.00	8.0	20
8.0	UG8FT and UG8GT	Plastic Power Pack ⁽²⁾	T0-220AC	300 - 400	1.25	8.0	35
8.0	UGB8FT and UGB8GT	Power Pack SMD ⁽²⁾	T0-263AB (D ² PAK)	300 - 400	1.25	8.0	35
8.0	UGF8FT and UGF8GT	Isolated Power Pack ⁽²⁾	ITO-220AC	300 - 400	1.25	8.0	35
8.0	UG8HT and UG8JT	Plastic Power Pack ⁽²⁾	T0-220AC	500 - 600	1.75	8.0	25
8.0	UGB8HT and UGB8JT	Power Pack SMD ⁽²⁾	T0-263AB (D ² PAK)	500 - 600	1.75	8.0	25
8.0	UGF8HT and UGF8JT	Isolated Power Pack ⁽²⁾	ITO-220AC	500 - 600	1.75	8.0	25
8.0	UG8HCT and UG8JCT	Plastic Power Pack ⁽²⁾⁽³⁾	T0-220AB	500 - 600	1.75	4.0	25
8.0	UGB8HCT and UGB8JCT	Power Pack SMD ⁽²⁾⁽³⁾	T0-263AB (D ² PAK)	500 - 600	1.75	4.0	25
8.0	UGF8HCT and UGF8JCT	Isolated Power Pack ⁽²⁾⁽³⁾	ITO-220AB	500 - 600	1.75	4.0	25
10	BYQ28E-100 to BYQ28E-200	Power Pack SMD ⁽²⁾⁽³⁾	T0-220AB	100 - 200	1.10	5.0	20
10	BYQ28EB-100 to BYQ28EB-200	Power Pack SMD ⁽²⁾⁽³⁾	T0-263AB (D ² PAK)	100 - 200	1.10	5.0	20
10	BYQ28EF-100 to BYQ28EF-200	Isolated Power Pack ⁽²⁾⁽³⁾	ITO-220AB	100 - 200	1.10	5.0	20
10	BYT28-300 and BYT28-400	Plastic Power Pack ⁽²⁾⁽³⁾	T0-220AB	300 - 400	1.30	5.0	35
10	BYT28B-300 and BYT28B-400	Power Pack SMD ⁽²⁾⁽³⁾	T0-263AB (D ² PAK)	300 - 400	1.30	5.0	35
10	BYT28F-300 and BYT28F-400	Isolated Power Pack ⁽²⁾⁽³⁾	ITO-220AB	300 - 400	1.30	5.0	35
10	UG10BCT to UG10DCT	Plastic Power Pack ⁽²⁾⁽³⁾	T0-220AB	100 - 200	1.10	5.0	20
10	UGB10BCT to UGB10DCT	Power Pack SMD ⁽²⁾⁽³⁾	T0-263AB (D ² PAK)	100 - 200	1.10	5.0	20
10	UGF10BCT to UGF10DCT	Isolated Power Pack ⁽²⁾⁽³⁾	ITO-220AB	100 - 200	1.10	5.0	20
10	UG10FCT and UG10GCT	Plastic Power Pack ⁽²⁾⁽³⁾	T0-220AB	300 - 400	1.30	5.0	35
10	UGB10FCT and UGB10GCT	Power Pack SMD ⁽²⁾⁽³⁾	T0-263AB (D ² PAK)	300 - 400	1.30	5.0	35
10	UGF10FCT and UGF10GCT	Isolated Power Pack ⁽²⁾⁽³⁾	ITO-220AB	300 - 400	1.30	5.0	35
10	UH10FT	Plastic Power Pack ⁽⁴⁾	T0-220AC	300	1.2	10	25
10	UHB10FT	Power Pack SMD ⁽⁴⁾	T0-263AB (D ² PAK)	300	1.2	10	25
10	U10BCT to U10DCT	Plastic Power Pack ⁽³⁾⁽⁴⁾	T0-220AB	100 - 200	1.10	5.0	20
10	UB10BCT to UB10DCT	Power Pack SMD ⁽³⁾⁽⁴⁾	T0-263AB (D ² PAK)	100 - 200	1.10	5.0	20
10	UF10BCT to UF10DCT	Isolated Power Pack ⁽³⁾⁽⁴⁾	ITO-220AB	100 - 200	1.10	5.0	20
12	UG12HT and UG12JT	Plastic Power Pack ⁽²⁾	T0-220AC	500 - 600	1.75	12	30
12	UGB12HT and UGB12JT	Power Pack SMD ⁽²⁾	T0-263AB (D ² PAK)	500 - 600	1.75	12	30
12	UGF12HT and UGF12JT	Isolated Power Pack ⁽²⁾	ITO-220AC	500 - 600	1.75	12	30
15	UG15HT and UG15JT	Plastic Power Pack ⁽²⁾	T0-220AC	500 - 600	1.75	15	35
15	UGB15HT and UGB15JT	Power Pack SMD ⁽²⁾	T0-263AB (D ² PAK)	500 - 600	1.75	15	35
15	UGF15HT and UGF15JT	Isolated Power Pack ⁽²⁾	ITO-220AC	500 - 600	1.75	15	35

Note:

1. Bold text indicates new product
2. Glass passivated die

3. Dual center-tapped device (V_F limit at I_F is per diode)

4. Oxide planar die



RECTIFIERS

Ultrafast Recovery Rectifiers



Ultrafast Recovery Rectifiers, continued

$I_{F(AV)}$ (A)	Device ⁽¹⁾	Package		$V_{(BR)}$ Range (V)	Max V_F at I_F		T_{rr} (ns)
		Family ⁽³⁾	Type		(V)	(A)	
16	FEP16AT to FEP16JT	Plastic Power Pack ⁽²⁾⁽³⁾	TO-220AB	50 - 600	0.95 / 1.30 / 1.50	8	35 / 50
16	FEPB16AT to FEPB16JT	Power Pack SMD ⁽²⁾⁽³⁾	TO-263AB (D ² PAK)	50 - 600	0.95 / 1.30 / 1.50	8	35 / 50
16	FEPF16AT to FEPF16JT	Isolated Power Pack ⁽²⁾⁽³⁾	ITO-220AB	50 - 600	0.95 / 1.30 / 1.50	8	35 / 50
16	FES16AT to FES16JT	Plastic Power Pack ⁽²⁾	TO-220AC	50 - 600	0.975 / 1.30 / 1.50	16	35 / 50
16	FESB16AT to FESB16JT	Power Pack SMD ⁽²⁾	TO-263AB (D ² PAK)	50 - 600	0.975 / 1.30 / 1.50	16	35 / 50
16	FESF16AT to FESF16JT	Isolated Power Pack ⁽²⁾	ITO-220AC	50 - 600	0.975 / 1.30 / 1.50	16	35 / 50
16	GI2401 to GI2404	Plastic Power Pack ⁽²⁾⁽³⁾	TO-220AB	50 - 200	0.98	8.0	35
16	GIB2401 to GIB2404	Power Pack SMD ⁽²⁾⁽³⁾	TO-263AB (D ² PAK)	50 - 200	0.98	8.0	35
16	U16BCT to U16DCT	Plastic Power Pack⁽³⁾⁽⁴⁾	TO-220AB	100 - 200	1.10	8.0	35
16	UB16BCT to UB16DCT	Power Pack SMD⁽³⁾⁽⁴⁾	TO-263AB (D²PAK)	100 - 200	1.10	8.0	35
18	BYV32-50 to BYV32-200	Plastic Power Pack ⁽²⁾⁽³⁾	TO-220AB	50 - 200	1.15	20	25
18	BYVB32-50 to BYVB32-200	Power Pack SMD ⁽²⁾⁽³⁾	TO-263AB (D ² PAK)	50 - 200	1.15	20	25
18	BYVF32-50 to BYVF32-200	Isolated Power Pack ⁽²⁾⁽³⁾	ITO-220AB	50 - 200	1.15	20	25
18	UG18ACT to UG18DCT	Plastic Power Pack ⁽²⁾⁽³⁾	TO-220AB	50 - 200	1.10	9.0	20
18	UGB18ACT to UGB18DCT	Power Pack SMD ⁽²⁾⁽³⁾	TO-263AB (D ² PAK)	50 - 200	1.10	9.0	20
18	UGF18ACT to UGF18DCT	Isolated Power Pack ⁽²⁾⁽³⁾	ITO-220AB	50 - 200	1.10	9.0	20
20	U20BCT to U20DCT	Plastic Power Pack⁽³⁾⁽⁴⁾	TO-220AB	100 - 200	1.00	10	35
20	UB20BCT to UB20DCT	Power Pack SMD⁽³⁾⁽⁴⁾	TO-263AB (D²PAK)	100 - 200	1.00	10	35
20	UH20FCT	Plastic Power Pack⁽³⁾⁽⁴⁾	TO-220AB	300	1.2	10	25
20	UHB20FCT	Power Pack SMD⁽³⁾⁽⁴⁾	TO-263AB (D²PAK)	300	1.2	10	25
20	UHF20FCT	Isolated Power Pack⁽³⁾⁽⁴⁾	ITO-220AB	300	1.2	10	25
30	FEP30AP to FEP30JP	Plastic Power Pack ⁽²⁾⁽³⁾	TO-247AD	50 - 600	0.95 / 1.3 / 1.5	15	35 / 50
30	U30BCT to U30DCT	Plastic Power Pack⁽³⁾⁽⁴⁾	TO-220AB	100 - 200	1.05	15	25
30	UB30BCT to UB30DCT	Power Pack SMD⁽³⁾⁽⁴⁾	TO-263AB (D²PAK)	100 - 200	1.05	15	25
30	UG30APT to UG30DPT	Plastic Power Pack ⁽²⁾⁽³⁾	TO-247AD	50 - 200	1.00	15	25

Note:

1. Bold text indicates new product
2. Glass passivated die

3. Dual center-tapped device (V_F limit at I_F is per diode)
4. Oxide planar die

FRED Pt® (Fast Recovery Epitaxial Diodes)

I _{F(AV)} (A)	Device ⁽⁵⁾	Source ⁽⁴⁾	Package		V _(BR) Range (V)	Max V _F at I _F		Typ t _{rr} at 25 °C (ns)	Typ Q _{rr} at 125 °C	
			Family	Type		(V)	(A)		setup (I _F , di _F /dt, V _R)	(nC)
4	VS-4EWH02FNx-M3	I	Power Plastic SMD ⁽¹⁾⁽³⁾⁽⁶⁾	TO-252AA (DPAK)	200	0.95	4	20	4 A, 200 A/us, 160 V	20 at R.T.
5	VS-5EWH06FNx-M3	I	Power Plastic SMD ⁽¹⁾⁽³⁾⁽⁶⁾	TO-252AA (DPAK)	600	1.85	5	21	5 A, 200 A/us, 390 V	33 at R.T.
5	VS-5EWL06FNx-M3	I	Power Plastic SMD ⁽¹⁾⁽³⁾⁽⁶⁾	TO-252AA (DPAK)	600	1.25	5	154	5 A, 200 A/us, 390 V	826 at R.T.
5	VS-5EWX06FNx-M3	I	Power Plastic SMD ⁽¹⁾⁽³⁾⁽⁶⁾	TO-252AA (DPAK)	600	2.90	5	16	5 A, 200 A/us, 390 V	19 at R.T.
6	VS-6CWH02FNx-M3	I	Power Plastic SMD ⁽²⁾⁽³⁾⁽⁶⁾	TO-252AA (DPAK)	200	1.00	3	19	3 A, 200 A/us, 160 V	60 at R.T.
6	VS-MURD620CTx-M3	I	Power Plastic SMD ⁽²⁾⁽³⁾⁽⁶⁾	TO-252AA (DPAK)	200	1.2	6	19	3 A, 200 A/us, 160 V	60
6	VS-6EWH06FNx-M3	I	Power Plastic SMD ⁽¹⁾⁽³⁾⁽⁶⁾	TO-252AA (DPAK)	600	2.10	6	21	6 A, 200 A/us, 390 V	33 at R.T.
6	VS-6EWL06FNx-M3	I	Power Plastic SMD ⁽¹⁾⁽³⁾⁽⁶⁾	TO-252AA (DPAK)	600	1.35	6	173	6 A, 200 A/us, 390 V	988 at R.T.
6	VS-6EWX06FNx-M3	I	Power Plastic SMD ⁽¹⁾⁽³⁾⁽⁶⁾	TO-252AA (DPAK)	600	3.10	6	16	6 A, 200 A/us, 390 V	19 at R.T.
8	VS-8S2TH06I-M	I	Power Plastic Through Hole ⁽¹⁾⁽⁶⁾	ITO-220AC	600	3.1	8	11	8 A, 200 A/us, 390 V	35
8	VS-MUR820PBF	I	Power Plastic Through Hole ⁽¹⁾⁽⁸⁾	TO-220AC	200	0.975	8	20	8 A, 200 A/us, 160 V	23 at R.T.
8	VS-MUR820-N3^(A)	I	Power Plastic Through Hole ⁽¹⁾⁽⁷⁾	TO-220AC	200	0.975	8	20	8 A, 200 A/us, 160 V	23 at R.T.
8	VS-8ETH03PBF	I	Power Plastic Through Hole ⁽¹⁾⁽⁸⁾	TO-220AC	300	1.25	8	27	8 A, 200 A/us, 200 V	106
8	VS-8ETH03-N3^(A)	I	Power Plastic Through Hole ⁽¹⁾⁽⁷⁾	TO-220AC	300	1.25	8	27	8 A, 200 A/us, 200 V	106
8	VS-8ETU04PBF	I	Power Plastic Through Hole ⁽¹⁾⁽⁸⁾	TO-220AC	400	1.3	8	43	8 A, 200 A/us, 200 V	210
8	VS-8ETU04-N3^(A)	I	Power Plastic Through Hole ⁽¹⁾⁽⁷⁾	TO-220AC	400	1.3	8	43	8 A, 200 A/us, 200 V	210
8	VS-8ETH06PBF	I	Power Plastic Through Hole ⁽¹⁾⁽⁸⁾	TO-220AC	600	2.4	8	25	8 A, 200 A/us, 400 V	120
8	VS-ETH0806-M3	I	Power Plastic Through Hole ⁽¹⁾⁽⁶⁾	TO-220AC	600	2.65	8	21	8 A, 200 A/us, 400 V	110
8	VS-8ETH06-N3^(A)	I	Power Plastic Through Hole ⁽¹⁾⁽⁷⁾	TO-220AC	600	2.4	8	25	8 A, 200 A/us, 400 V	120
8	VS-8ETL06PBF	I	Power Plastic Through Hole ⁽¹⁾⁽⁸⁾	TO-220AC	600	1.05	8	170	8 A, 200 A/us, 400 V	2200
8	VS-ETL0806-M3	I	Power Plastic Through Hole ⁽¹⁾⁽⁸⁾	TO-220AC	600	1.05	8	170	8 A, 200 A/us, 400 V	2200
8	VS-8ETL06-N3^(A)	I	Power Plastic Through Hole ⁽¹⁾⁽⁷⁾	TO-220AC	600	1.05	8	170	8 A, 200 A/us, 400 V	2200
8	VS-8ETX06PBF	I	Power Plastic Through Hole ⁽¹⁾⁽⁸⁾	TO-220AC	600	3	8	17	8 A, 200 A/us, 400 V	88
8	VS-ETX0806-M3	I	Power Plastic Through Hole ⁽¹⁾⁽⁶⁾	TO-220AC	600	3.40	8	17	8 A, 200 A/us, 400 V	72
8	VS-8ETX06-N3^(A)	I	Power Plastic Through Hole ⁽¹⁾⁽⁷⁾	TO-220AC	600	3	8	17	8 A, 200 A/us, 400 V	88
8	VS-ETH0806FP-M3	I	Isolated Power Plastic ⁽¹⁾⁽⁶⁾	TO-220FPAC	600	2.4	8	25	8 A, 200 A/us, 400 V	120

Note:

1. Single die device
2. Dual center-tapped device (V_F limit at I_F is per diode)
3. x designates tube or tape&reel version on SMD products
none = tube
TR = tape and reel centered (for DPAK only)
TRL = tape and reel left oriented
TRR = tape and reel right oriented

4. Source: I = formerly International Rectifier Diode unit
5. Bold text indicates new product
6. Halogen free mould compound and RoHs compliant
7. Halogen free mould compound and RoHs compliant and totally lead free
8. RoHs compliant and totally lead free
- A. Automotive Grade Device available on request



RECTIFIERS

Ultrafast Recovery Rectifiers



FRED Pt® (Fast Recovery Epitaxial Diodes), continued

I _{F(AV)} (A)	Device ⁽⁵⁾	Source ⁽⁴⁾	Package		V _(BR) Range (V)	Max V _F at I _F		Typ t _r at 25 °C (ns)	Typ Q _{rr} at 125 °C setup (I _F , di/dt, V _R)	
			Family	Type		(V)	(A)		(nC)	
8	VS-8ETH06FPPBF	I	Isolated Power Plastic ⁽¹⁾⁽⁸⁾	TO-220FPAC	600	2.4	8	25	8 A, 200 A/us, 400 V	120
8	VS-8ETH06FP-N3	I	Isolated Power Plastic ⁽¹⁾⁽⁷⁾	TO-220FPAC	600	2.4	8	25	8 A, 200 A/us, 400 V	120
8	VS-8ETL06FPPBF	I	Isolated Power Plastic ⁽¹⁾⁽⁸⁾	TO-220FPAC	600	1.05	8	170	8 A, 200 A/us, 400 V	2200
8	VS-ETL0806FP-M3	I	Isolated Power Plastic ⁽¹⁾⁽⁶⁾	TO-220FPAC	600	1.07	8	180	8 A, 200 A/us, 400 V	2400
8	VS-8ETL06FP-N3	I	Isolated Power Plastic ⁽¹⁾⁽⁷⁾	TO-220FPAC	600	1.05	8	170	8 A, 200 A/us, 400 V	2200
8	VS-8ETX06FPPBF	I	Isolated Power Plastic ⁽¹⁾⁽⁸⁾	TO-220FPAC	600	3	8	17	8 A, 200 A/us, 400 V	88
8	VS-ETX0806FP-M3	I	Isolated Power Plastic ⁽¹⁾⁽⁶⁾	TO-220FPAC	600	3.40	8	17	8 A, 200 A/us, 400 V	72
8	VS-8ETX06FP-N3	I	Isolated Power Plastic ⁽¹⁾⁽⁷⁾	TO-220FPAC	600	3	8	17	8 A, 200 A/us, 400 V	88
8	VS-8EWH02FNx-M3	I	Power Plastic SMD ⁽¹⁾⁽³⁾⁽⁶⁾	TO-252AA (DPAK)	200	0.97	8	24	8 A, 200 A/us, 160 V	27 at R.T.
8	VS-8CWH02FNx-M3	I	Power Plastic SMD ⁽²⁾⁽³⁾⁽⁶⁾	TO-252AA (DPAK)	200	0.95	4	20	4A, 200A/us, 160V	20 at R.T.
8	VS-8EWH06FNx-M3	I	Power Plastic SMD ⁽¹⁾⁽³⁾⁽⁶⁾	TO-252AA (DPAK)	600	2.40	8	25	8 A, 200 A/us, 390 V	25 at R.T.
8	VS-8EWL06FNx-M3	I	Power Plastic SMD ⁽¹⁾⁽³⁾⁽⁶⁾	TO-252AA (DPAK)	600	1.05	8	170	8 A, 200 A/us, 390 V	1300 at R.T.
8	VS-8EWX06FNx-M3	I	Power Plastic SMD ⁽¹⁾⁽³⁾⁽⁶⁾	TO-252AA (DPAK)	600	3.40	8	17	8 A, 200 A/us, 390 V	20 at R.T.
8	VS-MURB820-1PBF^(A)	I	Power Plastic Through Hole ⁽¹⁾⁽⁶⁾	TO-262 (I ² PAK)	200	0.975	8	20	8 A, 200 A/us, 160 V	23 at R.T.
8	VS-8ETH03-1PBF^(A)	I	Power Plastic Through Hole ⁽¹⁾⁽⁶⁾	TO-262 (I ² PAK)	300	1.25	8	27	8 A, 200 A/us, 200 V	106
8	VS-8ETU04-1PBF^(A)	I	Power Plastic Through Hole ⁽¹⁾⁽⁶⁾	TO-262 (I ² PAK)	400	1.3	8	43	8 A, 200 A/us, 200 V	210
8	VS-8ETH06-1PBF^(A)	I	Power Plastic Through Hole ⁽¹⁾⁽⁶⁾	TO-262 (I ² PAK)	600	2.4	8	25	8 A, 200 A/us, 400 V	120
8	VS-8ETL06-1PBF^(A)	I	Power Plastic Through Hole ⁽¹⁾⁽⁶⁾	TO-262 (I ² PAK)	600	1.05	8	170	8 A, 200 A/us, 400 V	2200
8	VS-8ETX06-1PBF^(A)	I	Power Plastic Through Hole ⁽¹⁾⁽⁶⁾	TO-262 (I ² PAK)	600	3	8	17	8 A, 200 A/us, 400 V	88
8	VS-MURB820xPBF^(A)	I	Power Plastic SMD ⁽¹⁾⁽³⁾⁽⁶⁾	TO-263AB (D ² PAK)	200	0.975	8	20	8 A, 200 A/us, 160 V	23 at R.T.
8	VS-8ETH03SxPBF^(A)	I	Power Plastic SMD ⁽¹⁾⁽³⁾⁽⁶⁾	TO-263AB (D ² PAK)	300	1.25	8	27	8 A, 200 A/us, 200 V	106
8	VS-8ETU04SxPBF^(A)	I	Power Plastic SMD ⁽¹⁾⁽³⁾⁽⁶⁾	TO-263AB (D ² PAK)	400	1.3	8	43	8 A, 200 A/us, 200 V	210
8	VS-8ETH06SxPBF^(A)	I	Power Plastic SMD ⁽¹⁾⁽³⁾⁽⁶⁾	TO-263AB (D ² PAK)	600	2.4	8	25	8 A, 200 A/us, 400 V	120
8	VS-8ETL06SxPBF^(A)	I	Power Plastic SMD ⁽¹⁾⁽³⁾⁽⁶⁾	TO-263AB (D ² PAK)	600	1.05	8	170	8 A, 200 A/us, 400 V	2200
8	VS-8ETX06SxPBF^(A)	I	Power Plastic SMD ⁽¹⁾⁽³⁾⁽⁶⁾	TO-263AB (D ² PAK)	600	3	8	17	8 A, 200 A/us, 400 V	88

Note:

1. Single die device
2. Dual center-tapped device (V_F limit at I_F is per diode)
3. x designates tube or tape&reel version on SMD products
none = tube
TR = tape and reel centered (for DPAK only)
TRL = tape and reel left oriented
TRR = tape and reel right oriented

4. Source: I = formerly International Rectifier Diode unit
5. Bold text indicates new product
6. Halogen free mould compound and RoHs compliant
7. Halogen free mould compound and RoHs compliant and totally lead free
8. RoHs compliant and totally lead free
- A. Automotive Grade Device available on request



RECTIFIERS

Ultrafast Recovery Rectifiers



FRED Pt® (Fast Recovery Epitaxial Diodes), continued

I _{F(AV)} (A)	Device ⁽⁵⁾	Source ⁽⁴⁾	Package		V _(BR) Range (V)	Max V _F at I _F		Typ t _r at 25 °C (ns)	Typ Q _{rr} at 125 °C	
			Family	Type		(V)	(A)		setup (I _F , di _F /dt, V _R)	(nC)
10	VS-MUR1020CTPBF	I	Power Plastic Through Hole ⁽²⁾	TO-220AB	200	1.25	10	24	5 A, 200 A/us, 160 V	76
10	VS-MUR1020CT-N3^(A)	I	Power Plastic Through Hole ⁽²⁾⁽⁷⁾	TO-220AB	200	1.25	10	24	5 A, 200 A/us, 160 V	76
10	VS-10CWH02FNx-M3	I	Power Plastic SMD ⁽²⁾⁽³⁾⁽⁶⁾	TO-252AA (DPAK)	200	0.98	5	21	5 A, 200 A/us, 160 V	20 at R.T.
10	VS-MURB1020CT-1PBF^(A)	I	Power Plastic Through Hole ⁽²⁾⁽⁶⁾	TO-262 (I ² PAK)	200	1.25	10	24	5 A, 200 A/us, 160 V	76
10	VS-MURB1020CTxPBF^(A)	I	Power Plastic SMD ⁽²⁾⁽³⁾⁽⁶⁾	TO-263AB (D ² PAK)	200	1.25	10	24	5 A, 200 A/us, 160 V	76
12	VS-12EWH06FNx-M3	I	Power Plastic SMD ⁽¹⁾⁽³⁾⁽⁶⁾	TO-252AA (DPAK)	600	2.50	12	26	12 A, 200 A/us, 390 V	48 at R.T.
15	VS-MUR1520PBF	I	Power Plastic Through Hole ⁽¹⁾⁽⁸⁾	TO-220AC	200	1.05	15	22	15 A, 200 A/us, 160 V	90
15	VS-MUR1520-N3^(A)	I	Power Plastic Through Hole ⁽¹⁾⁽⁷⁾	TO-220AC	200	1.05	15	22	15 A, 200 A/us, 160 V	90
15	VS-15ETH03PBF	I	Power Plastic Through Hole ⁽¹⁾⁽⁸⁾	TO-220AC	300	1.25	15	32	15 A, 200 A/us, 200 V	137
15	VS-15ETH03-N3^(A)	I	Power Plastic Through Hole ⁽¹⁾⁽⁷⁾	TO-220AC	300	1.25	15	32	15 A, 200 A/us, 200 V	137
15	VS-15ETH06PBF	I	Power Plastic Through Hole ⁽¹⁾⁽⁸⁾	TO-220AC	600	2.2	15	29	15 A, 200 A/us, 390 V	300
15	VS-ETH1506-M3	I	Power Plastic Through Hole ⁽¹⁾⁽⁶⁾	TO-220AC	600	2.45	15	29	15 A, 200 A/us, 390 V	240
15	VS-15ETH06-N3^(A)	I	Power Plastic Through Hole ⁽¹⁾⁽⁷⁾	TO-220AC	600	2.2	15	29	15 A, 200 A/us, 390 V	300
15	VS-ETU1506-M3	I	Power Plastic Through Hole ⁽¹⁾⁽⁶⁾	TO-220AC	600	1.9	15	40	15 A, 200 A/us, 390 V	730
15	VS-15ETL06PBF	I	Power Plastic Through Hole ⁽¹⁾⁽⁸⁾	TO-220AC	600	1.05	15	220	15 A, 200 A/us, 390 V	4300
15	VS-ETL1506-M3	I	Power Plastic Through Hole ⁽¹⁾⁽⁶⁾	TO-220AC	600	1.07	15	210	15 A, 200 A/us, 390 V	4000
15	VS-15ETL06-N3^(A)	I	Power Plastic Through Hole ⁽¹⁾⁽⁷⁾	TO-220AC	600	1.05	15	220	15 A, 200 A/us, 390 V	4300
15	VS-15ETX06PBF	I	Power Plastic Through Hole ⁽¹⁾⁽⁸⁾	TO-220AC	600	3.2	15	22	15 A, 200 A/us, 390 V	150
15	VS-ETX1506-M3	I	Power Plastic Through Hole ⁽¹⁾⁽⁶⁾	TO-220AC	600	3.40	15	20	15 A, 200 A/us, 390 V	135
15	VS-15ETX06-N3^(A)	I	Power Plastic Through Hole ⁽¹⁾⁽⁷⁾	TO-220AC	600	3.2	15	22	15 A, 200 A/us, 390 V	150
15	VS-15ETH06FPPBF	I	Isolated Power Plastic ⁽¹⁾⁽⁸⁾	TO-220FPAC	600	2.2	15	29	15 A, 200 A/us, 390 V	300
15	VS-ETH1506FP-M3	I	Isolated Power Plastic ⁽¹⁾⁽⁶⁾	TO-220FPAC	600	2.2	15	29	15 A, 200 A/us, 390 V	300
15	VS-15ETH06FP-N3	I	Isolated Power Plastic ⁽¹⁾⁽⁷⁾	TO-220FPAC	600	2.2	15	29	15 A, 200 A/us, 390 V	300
15	VS-ETU1506FP-M3	I	Isolated Power Plastic ⁽¹⁾⁽⁶⁾	TO-220FPAC	600	1.9	15	40	15 A, 200 A/us, 390 V	730
15	VS-15ETL06FPPBF	I	Isolated Power Plastic ⁽¹⁾⁽⁸⁾	TO-220FPAC	600	1.05	15	220	15 A, 200 A/us, 390 V	4300
15	VS-ETL1506FP-M3	I	Isolated Power Plastic ⁽¹⁾⁽⁶⁾	TO-220FPAC	600	1.07	15	210	15 A, 200 A/us, 390 V	4000
15	VS-15ETL06FP-N3	I	Isolated Power Plastic ⁽¹⁾⁽⁷⁾	TO-220FPAC	600	1.05	15	220	15 A, 200 A/us, 390 V	4300
15	VS-15ETX06FPPBF	I	Isolated Power Plastic ⁽¹⁾⁽⁸⁾	TO-220FPAC	600	3.2	15	22	15 A, 200 A/us, 390 V	150
15	VS-ETX1506FP-M3	I	Isolated Power Plastic ⁽¹⁾⁽⁶⁾	TO-220FPAC	600	3.40	15	20	15 A, 200 A/us, 390 V	135
15	VS-15ETX06FP-N3	I	Isolated Power Plastic ⁽¹⁾⁽⁷⁾	TO-220FPAC	600	3.2	15	22	15 A, 200 A/us, 390 V	150

Note:

1. Single die device
2. Dual center-tapped device (V_F limit at I_F is per diode)
3. x designates tube or tape&reel version on SMD products
none = tube
TR = tape and reel centered (for DPAK only)
TRL = tape and reel left oriented
TRR = tape and reel right oriented

4. Source: I = formerly International Rectifier Diode unit
5. Bold text indicates new product
6. Halogen free mould compound and RoHs compliant
7. Halogen free mould compound and RoHs compliant and totally lead free
8. RoHs compliant and totally lead free
- A. Automotive Grade Device available on request



RECTIFIERS

Ultrafast Recovery Rectifiers



FRED Pt® (Fast Recovery Epitaxial Diodes), continued

I _{F(AV)} (A)	Device ⁽⁵⁾	Source ⁽⁴⁾	Package		V _(BR) Range (V)	Max V _F at I _F		Typ t _{rr} at 25 °C (ns)	Typ Q _{rr} at 125 °C <i>setup</i> (I _F , di _F /dt, V _R)	
			Family	Type		(V)	(A)			(nC)
15	VS-15AWL06FNx-M3	I	Power Plastic SMD ⁽¹⁾⁽³⁾⁽⁶⁾	TO-252AA (DPAK)	600	1.05	15	250	15 A, 200 A/us, 390 V	4000
15	VS-15EWH06FNx-M3	I	Power Plastic SMD ⁽¹⁾⁽³⁾⁽⁶⁾	TO-252AA (DPAK)	600	2.10	15	31	15 A, 200 A/us, 390 V	60 at R.T.
15	VS-15EWL06FNx-M3	I	Power Plastic SMD ⁽¹⁾⁽³⁾⁽⁶⁾	TO-252AA (DPAK)	600	1.05	15	250	15 A, 200 A/us, 390 V	4000
15	VS-15EWX06FNx-M3	I	Power Plastic SMD ⁽¹⁾⁽³⁾⁽⁶⁾	TO-252AA (DPAK)	600	3.20	15	22	15 A, 200 A/us, 390 V	29 at R.T.
15	VS-MURB1520-1PBF^(A)	I	Power Plastic Through Hole ⁽¹⁾⁽⁶⁾	TO-262 (I ² PAK)	200	1.05	15	22	15 A, 200 A/us, 160 V	90
15	VS-15ETH03-1PBF^(A)	I	Power Plastic Through Hole ⁽¹⁾⁽⁶⁾	TO-262 (I ² PAK)	300	1.25	15	32	15 A, 200 A/us, 200 V	137
15	VS-15ETH06-1PBF	I	Power Plastic Through Hole ⁽¹⁾⁽⁶⁾	TO-262 (I ² PAK)	600	2.2	15	29	15 A, 200 A/us, 390 V	300
15	VS-ETH1506-1-M3^(A)	I	Power Plastic Through Hole ⁽¹⁾⁽⁶⁾	TO-262 (I ² PAK)	600	2.25	15	29	15 A, 200 A/us, 390 V	280
15	VS-15ETL06-1PBF	I	Power Plastic Through Hole ⁽¹⁾⁽⁶⁾	TO-262 (I ² PAK)	600	1.05	15	220	15 A, 200 A/us, 390 V	4300
15	VS-ETL1506-1-M3^(A)	I	Power Plastic Through Hole ⁽¹⁾⁽⁶⁾	TO-262 (I ² PAK)	600	1.07	15	210	15 A, 200 A/us, 390 V	4000
15	VS-ETU1506-1-M3^(A)	I	Power Plastic Through Hole ⁽¹⁾⁽⁶⁾	TO-262 (I ² PAK)	600	1.9	15	40	15 A, 200 A/us, 390 V	730
15	VS-15ETX06-1PBF	I	Power Plastic Through Hole ⁽¹⁾⁽⁶⁾	TO-262 (I ² PAK)	600	3.2	15	22	15 A, 200 A/us, 390 V	150
15	VS-ETX1506-1-M3^(A)	I	Power Plastic Through Hole ⁽¹⁾⁽⁶⁾	TO-262 (I ² PAK)	600	3.4	15	20	15 A, 200 A/us, 390 V	140
15	VS-MURB1520xPBF^(A)	I	Power Plastic SMD ⁽¹⁾⁽³⁾⁽⁶⁾	TO-263AB (D ² PAK)	200	1.05	15	22	15 A, 200 A/us, 160 V	90
15	VS-15ETH03SxPBF^(A)	I	Power Plastic SMD ⁽¹⁾⁽³⁾⁽⁶⁾	TO-263AB (D ² PAK)	300	1.25	15	32	15 A, 200 A/us, 200 V	137
15	VS-15ETH06SxPBF^(A)	I	Power Plastic SMD ⁽¹⁾⁽³⁾⁽⁶⁾	TO-263AB (D ² PAK)	600	2.2	15	29	15 A, 200 A/us, 390 V	300
15	VS-ETH1506Sx-M3^(A)	I	Power Plastic SMD ⁽¹⁾⁽³⁾⁽⁶⁾	TO-263AB (D ² PAK)	600	2.25	15	29	15 A, 200 A/us, 390 V	280
15	VS-ETU1506Sx-M3^(A)	I	Power Plastic SMD ⁽¹⁾⁽³⁾⁽⁶⁾	TO-263AB (D ² PAK)	600	1.9	15	40	15 A, 200 A/us, 390 V	730
15	VS-15ETL06SxPBF	I	Power Plastic SMD ⁽¹⁾⁽³⁾⁽⁶⁾	TO-263AB (D ² PAK)	600	1.05	15	220	15 A, 200 A/us, 390 V	4300
15	VS-ETL1506Sx-M3^(A)	I	Power Plastic SMD ⁽¹⁾⁽³⁾⁽⁶⁾	TO-263AB (D ² PAK)	600	1.07	15	210	15 A, 200 A/us, 390 V	4000
15	VS-15ETX06SxPBF	I	Power Plastic SMD ⁽¹⁾⁽³⁾⁽⁶⁾	TO-263AB (D ² PAK)	600	3.2	15	22	15 A, 200 A/us, 390 V	150
15	VS-ETX1506Sx-M3^(A)	I	Power Plastic SMD ⁽¹⁾⁽³⁾⁽⁶⁾	TO-263AB (D ² PAK)	600	3.4	15	20	15 A, 200 A/us, 390 V	140
16	VS-MUR1620CTPBF	I	Power Plastic Through Hole ⁽²⁾⁽⁸⁾	TO-220AB	200	0.975	8	20	8 A, 200 A/us, 160 V	23 at R.T.

Note:

1. Single die device
2. Dual center-tapped device (V_F limit at I_F is per diode)
3. x designates tube or tape&reel version on SMD products
none = tube
TR = tape and reel centered (for DPAK only)
TRL = tape and reel left oriented
TRR = tape and reel right oriented

4. Source: I = formerly International Rectifier Diode unit
5. Bold text indicates new product
6. Halogen free mould compound and RoHs compliant
7. Halogen free mould compound and RoHs compliant and totally lead free
8. RoHs compliant and totally lead free
- A. Automotive Grade Device available on request

FRED Pt® (Fast Recovery Epitaxial Diodes), continued

I _{F(AV)} (A)	Device ⁽⁵⁾	Source ⁽⁴⁾	Package		V _(BR) Range (V)	Max V _F at I _F		Typ t _r at 25 °C (ns)	Typ Q _{rr} at 125 °C	
			Family	Type		(V)	(A)		setup (I _F , di _F /dt, V _R)	(nC)
16	VS-MUR1620CT-N3^(A)	I	Power Plastic Through Hole ⁽²⁾⁽⁷⁾	TO-220AB	200	0.975	8	20	8 A, 200 A/us, 160 V	23 at R.T.
16	VS-16CTU04PBF	I	Power Plastic Through Hole ⁽²⁾⁽⁸⁾	TO-220AB	400	1.3	8	43	8 A, 200 A/us, 200 V	210
16	VS-16CTU04-N3^(A)	I	Power Plastic Through Hole ⁽²⁾⁽⁷⁾	TO-220AB	400	1.3	8	43	8 A, 200 A/us, 200 V	210
16	VS-MURB1620CT-1PBF^(A)	I	Power Plastic Through Hole ⁽²⁾⁽⁶⁾	TO-262 (I ² PAK)	200	0.975	8	20	8 A, 200 A/us, 160 V	23 at R.T.
16	VS-16CTU04-1PBF^(A)	I	Power Plastic Through Hole ⁽²⁾⁽⁶⁾	TO-262 (I ² PAK)	400	1.3	8	43	8 A, 200 A/us, 200 V	210
16	VS-MURB1620CTxPBF^(A)	I	Power Plastic SMD ⁽²⁾⁽³⁾⁽⁶⁾	TO-263AB (D ² PAK)	200	0.975	8	20	8 A, 200 A/us, 160 V	23 at R.T.
16	VS-16CTU04SxPBF^(A)	I	Power Plastic SMD ⁽²⁾⁽³⁾⁽⁶⁾	TO-263AB (D ² PAK)	400	1.3	8	43	8 A, 200 A/us, 200 V	210
20	VS-MUR2020CTPBF	I	Power Plastic Through Hole ⁽²⁾⁽⁸⁾	TO-220AB	200	1.15	16	21	10 A, 200 A/us, 160 V	25 at R.T.
20	VS-MUR2020CT-N3^(A)	I	Power Plastic Through Hole ⁽²⁾⁽⁷⁾	TO-220AB	200	1.15	16	21	10 A, 200 A/us, 160 V	25 at R.T.
20	VS-20CTH03PBF	I	Power Plastic Through Hole ⁽²⁾⁽⁸⁾	TO-220AB	300	1.25	10	31	10 A, 200 A/us, 200 V	120
20	VS-20CTH03-N3^(A)	I	Power Plastic Through Hole ⁽²⁾⁽⁷⁾	TO-220AB	300	1.25	10	31	10 A, 200 A/us, 200 V	120
20	VS-20CTH03FPPBF	I	Isolated Power Plastic ⁽²⁾⁽⁸⁾	TO-220FPAB	300	1.25	10	31	10 A, 200 A/us, 200 V	120
20	VS-20CTH03FP-N3	I	Isolated Power Plastic ⁽²⁾⁽⁷⁾	TO-220FPAB	300	1.25	10	31	10 A, 200 A/us, 200 V	120
20	VS-MURB2020CT-1PBF^(A)	I	Power Plastic Through Hole ⁽²⁾⁽⁶⁾	TO-262 (I ² PAK)	200	1.15	16	21	10 A, 200 A/us, 160 V	25 at R.T.
20	VS-20CTH03-1PBF^(A)	I	Power Plastic Through Hole ⁽²⁾⁽⁶⁾	TO-262 (I ² PAK)	300	1.25	10	31	10 A, 200 A/us, 200 V	120
20	VS-MURB2020CTxPBF^(A)	I	Power Plastic SMD ⁽²⁾⁽³⁾⁽⁶⁾	TO-263AB (D ² PAK)	200	1.15	16	21	10 A, 200 A/us, 160 V	25 at R.T.
20	VS-20CTH03SxPBF^(A)	I	Power Plastic SMD ⁽²⁾⁽³⁾⁽⁶⁾	TO-263AB (D ² PAK)	300	1.25	10	31	10 A, 200 A/us, 200 V	120
30	VS-30CTH02PBF	I	Power Plastic Through Hole ⁽²⁾⁽⁸⁾	TO-220AB	200	1.05	15	26	15 A, 200 A/us, 160 V	37 at R.T.
30	VS-30CTH02-N3^(A)	I	Power Plastic Through Hole ⁽²⁾⁽⁷⁾	TO-220AB	200	1.05	15	26	15 A, 200 A/us, 160 V	37 at R.T.
30	VS-30CTH03PBF	I	Power Plastic Through Hole ⁽²⁾⁽⁸⁾	TO-220AB	300	1.25	15	33	15 A, 200 A/us, 200 V	160
30	VS-30CTH03-N3^(A)	I	Power Plastic Through Hole ⁽²⁾⁽⁷⁾	TO-220AB	300	1.25	15	33	15 A, 200 A/us, 200 V	160
30	VS-30ETH06PBF	I	Power Plastic Through Hole ⁽¹⁾⁽⁸⁾	TO-220AC	600	2.6	30	31	30 A, 200 A/us, 200 V	345
30	VS-ETH3006-M3	I	Power Plastic Through Hole ⁽¹⁾⁽⁶⁾	TO-220AC	600	2.65	30	26	30 A, 200 A/us, 200 V	280
30	VS-ETU3006-M3	I	Power Plastic Through Hole ⁽¹⁾⁽⁶⁾	TO-220AC	600	2.00	30	45	30 A, 200 A/us, 200 V	580
30	VS-30ETH06-N3^(A)	I	Power Plastic Through Hole ⁽¹⁾⁽⁷⁾	TO-220AC	600	2.6	30	31	30 A, 200 A/us, 200 V	345
30	VS-30CTH02FPPBF	I	Isolated Power Plastic ⁽²⁾⁽⁸⁾	TO-220FPAB	200	1.05	15	26	15 A, 200 A/us, 160 V	37 at R.T.
30	VS-30CTH02FP-N3	I	Isolated Power Plastic ⁽²⁾⁽⁷⁾	TO-220FPAB	200	1.05	15	26	15 A, 200 A/us, 160 V	37 at R.T.
30	VS-30ETH06FP-F3	I	Isolated Power Plastic ⁽¹⁾⁽⁷⁾	TO-220FPAB	600	2.60	30	31	30 A, 200 A/us, 200 V	345
30	VS-ETH3006FP-M3	I	Isolated Power Plastic ⁽¹⁾⁽⁶⁾	TO-220FPAB	600	2.65	30	26	30 A, 200 A/us, 200 V	280
30	VS-ETU3006FP-M3	I	Isolated Power Plastic ⁽¹⁾⁽⁶⁾	TO-220FPAB	600	2.00	30	45	30 A, 200 A/us, 200 V	580

Note:

1. Single die device
2. Dual center-tapped device (V_F limit at I_F is per diode)
3. x designates tube or tape&reel version on SMD products
none = tube
TR = tape and reel centered (for DPAK only)
TRL = tape and reel left oriented
TRR = tape and reel right oriented

4. Source: I = formerly International Rectifier Diode unit
5. Bold text indicates new product
6. Halogen free mould compound and RoHs compliant
7. Halogen free mould compound and RoHs compliant and totally lead free
8. RoHs compliant and totally lead free
- A. Automotive Grade Device available on request



RECTIFIERS

Ultrafast Recovery Rectifiers



FRED Pt® (Fast Recovery Epitaxial Diodes), continued

I _{F(AV)} (A)	Device ⁽⁵⁾	Source ⁽⁴⁾	Package		V _(BR) Range (V)	Max V _F at I _F		Typ t _{rr} at 25 °C (ns)	Typ Q _{rr} at 125 °C setup (I _F , di _F /dt, V _R)	
			Family	Type		(V)	(A)		(nC)	
30	VS-30ETH06FP-N3	I	Isolated Power Plastic ⁽¹⁾⁽⁷⁾	TO-220FPAB	600	2.6	30	31	30 A, 200 A/us, 200 V	345
30	VS-MUR3020WTPBF	I	Power Plastic Through Hole ⁽²⁾⁽⁸⁾	TO-247AC	200	1.05	15	22	15 A, 200 A/us, 160 V	19 at R.T.
30	VS-MUR3020WT-N3^(A)	I	Power Plastic Through Hole ⁽²⁾⁽⁷⁾	TO-247AC	200	1.05	15	22	15 A, 200 A/us, 160 V	19 at R.T.
30	VS-30CPH03PBF	I	Power Plastic Through Hole ⁽²⁾⁽⁸⁾	TO-247AC	300	1.25	15	33	15 A, 200 A/us, 200 V	160
30	VS-30CPH03-N3^(A)	I	Power Plastic Through Hole ⁽²⁾⁽⁷⁾	TO-247AC	300	1.25	15	33	15 A, 200 A/us, 200 V	160
30	VS-30CPU04PBF	I	Power Plastic Through Hole ⁽²⁾⁽⁸⁾	TO-247AC	400	1.25	15	46	15 A, 200 A/us, 200 V	345
30	VS-30CPU04-N3^(A)	I	Power Plastic Through Hole ⁽²⁾⁽⁷⁾	TO-247AC	400	1.25	15	46	15 A, 200 A/us, 200 V	345
30	VS-30EPH03PBF	I	Power Plastic Through Hole ⁽¹⁾⁽⁸⁾	TO-247AC (mod)	300	1.25	30	38	30 A, 200 A/us, 200 V	190
30	VS-30EPH03-N3^(A)	I	Power Plastic Through Hole ⁽¹⁾⁽⁷⁾	TO-247AC (mod)	300	1.25	30	38	30 A, 200 A/us, 200 V	190
30	VS-30EPH06PBF	I	Power Plastic Through Hole ⁽¹⁾⁽⁸⁾	TO-247AC (mod)	600	2.6	30	31	30 A, 200 A/us, 200 V	345
30	VS-30EPH06-N3^(A)	I	Power Plastic Through Hole ⁽¹⁾⁽⁷⁾	TO-247AC (mod)	600	2.6	30	31	30 A, 200 A/us, 200 V	345
30	VS-APH3006-F3	I	Power Plastic Through Hole ⁽¹⁾⁽⁸⁾	TO-247AC (mod)	600	2.60	30	36	30 A, 200 A/us, 200 V	280
30	VS-APH3006-N3^(A)	I	Power Plastic Through Hole ⁽¹⁾⁽⁷⁾	TO-247AC (mod)	600	2.60	30	36	30 A, 200 A/us, 200 V	280
30	VS-EPH3006-F3	I	Power Plastic Through Hole ⁽¹⁾⁽⁸⁾	TO-247AC (mod)	600	2.60	30	36	30 A, 200 A/us, 200 V	280
30	VS-EPH3006-N3^(A)	I	Power Plastic Through Hole ⁽¹⁾⁽⁷⁾	TO-247AC (mod)	600	2.60	30	36	30 A, 200 A/us, 200 V	280
30	VS-EPU3006-F3	I	Power Plastic Through Hole ⁽¹⁾⁽⁸⁾	TO-247AC (mod)	600	2.00	30	45	30 A, 200 A/us, 200 V	580
30	VS-EPU3006-N3^(A)	I	Power Plastic Through Hole ⁽¹⁾⁽⁷⁾	TO-247AC (mod)	600	2.00	30	45	30 A, 200 A/us, 200 V	580
30	VS-APU3006-F3	I	Power Plastic Through Hole ⁽¹⁾⁽⁸⁾	TO-247AC (mod)	600	2.00	30	45	30 A, 200 A/us, 200 V	580
30	VS-APU3006-N3^(A)	I	Power Plastic Through Hole ⁽¹⁾⁽⁷⁾	TO-247AC (mod)	600	2.00	30	45	30 A, 200 A/us, 200 V	580
30	VS-30CTH02-1PBF^(A)	I	Power Plastic Through Hole ⁽²⁾⁽⁶⁾	TO-262 (I ² PAK)	200	1.05	15	26	15 A, 200 A/us, 160 V	37 at R.T.
30	VS-30ETH06-1PBF	I	Power Plastic Through Hole ⁽¹⁾⁽⁶⁾	TO-262 (I ² PAK)	600	2.6	30	31	30 A, 200 A/us, 200 V	345
30	VS-ETH3006-1-M3^(A)	I	Power Plastic Through Hole ⁽¹⁾⁽⁶⁾	TO-262 (I ² PAK)	600	2.6	30	26	30 A, 200 A/us, 200 V	280
30	VS-ETU3006-1-M3^(A)	I	Power Plastic Through Hole ⁽¹⁾⁽⁶⁾	TO-262 (I ² PAK)	600	2.00	30	45	30 A, 200 A/us, 200 V	580

Note:

1. Single die device
2. Dual center-tapped device (V_F limit at I_F is per diode)
3. x designates tube or tape&reel version on SMD products
none = tube
TR = tape and reel centered (for DPAK only)
TRL = tape and reel left oriented
TRR = tape and reel right oriented

4. Source: I = formerly International Rectifier Diode unit
5. Bold text indicates new product
6. Halogen free mould compound and RoHs compliant
7. Halogen free mould compound and RoHs compliant and totally lead free
8. RoHs compliant and totally lead free
- A. Automotive Grade Device available on request



RECTIFIERS

Ultrafast Recovery Rectifiers



FRED Pt® (Fast Recovery Epitaxial Diodes), continued

I _{F(AV)} (A)	Device ⁽⁵⁾	Source ⁽⁴⁾	Package		V _(BR) Range (V)	Max V _F at I _F		Typ t _r at 25 °C (ns)	Typ Q _{rr} at 125 °C	
			Family	Type		(V)	(A)		setup (I _F , di _F /dt, V _R)	(nC)
30	VS-30CTH02SxPBF^(A)	I	Power Plastic SMD ⁽²⁾⁽³⁾⁽⁶⁾	TO-263AB (D ² PAK)	200	1.05	15	26	15 A, 200 A/us, 160 V	37 at R.T.
30	VS-30ETH06SxPBF	I	Power Plastic SMD ⁽¹⁾⁽³⁾⁽⁶⁾	TO-263AB (D ² PAK)	600	2.6	30	31	30 A, 200 A/us, 200 V	345
30	VS-ETH3006Sx-M3^(A)	I	Power Plastic SMD ⁽¹⁾⁽³⁾⁽⁶⁾	TO-263AB (D ² PAK)	600	2.6	30	26	30 A, 200 A/us, 200 V	280
30	VS-ETU3006Sx-M3^(A)	I	Power Plastic SMD ⁽¹⁾⁽³⁾⁽⁶⁾	TO-263AB (D ² PAK)	600	2.00	30	45	30 A, 200 A/us, 200 V	580
60	VS-60CPU02-F	I	Power Plastic Through Hole ⁽²⁾⁽⁸⁾	TO-247AC	200	1.1	30	30	30 A, 200 A/us, 160 V	160
60	VS-60CPU02-N3^(A)	I	Power Plastic Through Hole ⁽²⁾⁽⁷⁾	TO-247AC	200	1.1	30	30	30 A, 200 A/us, 160 V	160
60	VS-60CPH03PBF	I	Power Plastic Through Hole ⁽²⁾⁽⁸⁾	TO-247AC	300	1.25	30	39	30 A, 200 A/us, 200 V	214
60	VS-60CPH03-N3^(A)	I	Power Plastic Through Hole ⁽²⁾⁽⁷⁾	TO-247AC	300	1.25	30	39	30 A, 200 A/us, 200 V	214
60	VS-60CPU04-F3	I	Power Plastic Through Hole ⁽²⁾⁽⁸⁾	TO-247AC	400	1.30	30	65	30 A, 200 A/us, 200 V	874
60	VS-60CPU04-N3^(A)	I	Power Plastic Through Hole ⁽²⁾⁽⁷⁾	TO-247AC	400	1.30	30	65	30 A, 200 A/us, 200 V	874
60	VS-60CPU06-F	I	Power Plastic Through Hole ⁽²⁾⁽⁸⁾	TO-247AC	600	1.65	30	42	30 A, 200 A/us, 200 V	630
60	VS-60CPU06-N3^(A)	I	Power Plastic Through Hole ⁽²⁾⁽⁷⁾	TO-247AC	600	1.65	30	42	30 A, 200 A/us, 200 V	630
60	VS-60APU02PBF	I	Power Plastic Through Hole ⁽¹⁾⁽⁸⁾	TO-247AC (mod)	200	1.08	60	28	60 A, 200 A/us, 160 V	220
60	VS-60APU02-N3^(A)	I	Power Plastic Through Hole ⁽¹⁾⁽⁸⁾	TO-247AC (mod)	200	1.08	60	28	60 A, 200 A/us, 160 V	220
60	VS-60APU04PBF	I	Power Plastic Through Hole ⁽¹⁾⁽⁸⁾	TO-247AC (mod)	400	1.25	60	85	60 A, 200 A/us, 200 V	1120
60	VS-60APU04-N3^(A)	I	Power Plastic Through Hole ⁽¹⁾⁽⁷⁾	TO-247AC (mod)	400	1.25	60	85	60 A, 200 A/us, 200 V	1120
60	VS-60APU06PBF	I	Power Plastic Through Hole ⁽¹⁾⁽⁸⁾	TO-247AC (mod)	600	1.68	60	81	60 A, 200 A/us, 200 V	1394
60	VS-60APU06-N3^(A)	I	Power Plastic Through Hole ⁽¹⁾⁽⁷⁾	TO-247AC (mod)	600	1.68	60	81	60 A, 200 A/us, 200 V	1394
60	VS-60EPU02PBF	I	Power Plastic Through Hole ⁽¹⁾⁽⁸⁾	TO-247AC (mod)	200	1.08	60	28	60 A, 200 A/us, 160 V	220
60	VS-60EPU02-N3^(A)	I	Power Plastic Through Hole ⁽¹⁾⁽⁷⁾	TO-247AC (mod)	200	1.08	60	28	60 A, 200 A/us, 160 V	220
60	VS-60EPU04PBF	I	Power Plastic Through Hole ⁽¹⁾⁽⁸⁾	TO-247AC (mod)	400	1.25	60	85	60 A, 200 A/us, 200 V	1120
60	VS-60EPU04-N3^(A)	I	Power Plastic Through Hole ⁽¹⁾⁽⁷⁾	TO-247AC (mod)	400	1.25	60	85	60 A, 200 A/us, 200 V	1120

Note:

1. Single die device
2. Dual center-tapped device (V_F limit at I_F is per diode)
3. x designates tube or tape&reel version on SMD products
none = tube
TR = tape and reel centered (for DPAK only)
TRL = tape and reel left oriented
TRR = tape and reel right oriented

4. Source: I = formerly International Rectifier Diode unit
5. Bold text indicates new product
6. Halogen free mould compound and RoHs compliant
7. Halogen free mould compound and RoHs compliant and totally lead free
8. RoHs compliant and totally lead free
- A. Automotive Grade Device available on request



RECTIFIERS

Ultrafast Recovery Rectifiers



FRED Pt® (Fast Recovery Epitaxial Diodes), continued

$I_{F(AV)}$ (A)	Device ⁽⁵⁾	Source ⁽⁴⁾	Package		$V_{(BR)}$ Range (V)	Max V_F at I_F		Typ t_r at 25 °C (ns)	Typ t_r at 25 °C	Typ Q_{rr} at 125 °C
			Family	Type		(V)	(A)		setup (I_F , di_F/dt , V_R)	(nC)
60	VS-60EPU06PBF	I	Power Plastic Through Hole ⁽¹⁾⁽⁸⁾	TO-247AC (mod)	600	1.68	60	81	60 A, 200 A/us, 200 V	1394
60	VS-60EPU06-N3^(A)	I	Power Plastic Through Hole ⁽¹⁾⁽⁷⁾	TO-247AC (mod)	600	1.68	60	81	60 A, 200 A/us, 200 V	1394
80	VS-80EBU02^(A)	I	Power Plastic Through Hole ⁽¹⁾⁽⁸⁾	POWERTAB™	200	1.13	80	32	80 A, 200 A/us, 160 V	240
80	VS-80EBU04^(A)	I	Power Plastic Through Hole ⁽¹⁾⁽⁸⁾	POWERTAB™	400	1.3	80	87	80 A, 200 A/us, 200 V	1300
80	VS-80CPU02-F3	I	Power Plastic Through Hole ⁽²⁾⁽⁸⁾	TO-247AC	200	0.90	40	33	40 A, 200 A/us, 200 V	216
80	VS-80CPU02-N3^(A)	I	Power Plastic Through Hole ⁽²⁾⁽⁷⁾	TO-247AC	200	0.90	40	33	40 A, 200 A/us, 200 V	216
80	VS-80CPH03-F3	I	Power Plastic Through Hole ⁽²⁾⁽⁸⁾	TO-247AC	300	1.25	40	41	40 A, 200 A/us, 200 V	265
80	VS-80CPH03-N3^(A)	I	Power Plastic Through Hole ⁽²⁾⁽⁷⁾	TO-247AC	300	1.25	40	41	40 A, 200 A/us, 200 V	265
150	VS-150EBU02^(A)	I	Power Plastic Through Hole ⁽¹⁾⁽⁸⁾	POWERTAB™	200	1.13	150	34	150 A, 200 A/us, 160 V	300
150	VS-150EBU04^(A)	I	Power Plastic Through Hole ⁽¹⁾⁽⁸⁾	POWERTAB™	400	1.3	150	93	150 A, 200 A/us, 200 V	1740

Note:

1. Single die device
2. Dual center-tapped device (V_F limit at I_F is per diode)
3. x designates tube or tape&reel version on SMD products
none = tube
TR = tape and reel centered (for DPAK only)
TRL = tape and reel left oriented
TRR = tape and reel right oriented

4. Source: I = formerly International Rectifier Diode unit
5. Bold text indicates new product
6. Halogen free mould compound and RoHs compliant
7. Halogen free mould compound and RoHs compliant and totally lead free
8. RoHs compliant and totally lead free
- A. Automotive Grade Device available on request



RECTIFIERS

Ultrafast Recovery Rectifiers



HEXFRED®

I _{F(AV)} (A)	Device ⁽⁵⁾	Source ⁽⁴⁾	Package		V _(BR) Range (V)	Max V _F at I _F		Typ t _{rr} at see setup (ns)	Typ Q _{rr} at see setup	
			Family	Type		(V)	(A)		setup (I _F , di _F /dt, V _R)	(nC)
4	VS-HFA04TB60PBF	I	Power Plastic Through Hole ⁽¹⁾⁽⁸⁾	TO-220AC	600	1.8	4	28	4 A, 200 A/us, 200 V	70
4	VS-HFA04TB60-N3^(A)	I	Power Plastic Through Hole ⁽¹⁾⁽⁷⁾	TO-220AC	600	1.8	4	28	4 A, 200 A/us, 200 V	70
4	VS-HFA04SD60SxPBF^(A)	I	Power Plastic SMD ⁽¹⁾⁽³⁾⁽⁹⁾	TO-252 (DPAK)	600	1.8	4	28	4 A, 200 A/us, 200 V	70
4	VS-HFA04SD60Sx-M3^(A)	I	Power Plastic SMD ⁽¹⁾⁽³⁾⁽⁶⁾	TO-252 (DPAK)	600	1.8	4	28	4 A, 200 A/us, 200 V	70
4	VS-HFA04TB60SxPBF^(A)	I	Power Plastic SMD ⁽¹⁾⁽³⁾⁽⁶⁾	TO-263AB (D ² PAK)	600	1.8	4	28	4 A, 200 A/us, 200 V	70
6	VS-HFA06TB120PBF	I	Power Plastic Through Hole ⁽¹⁾⁽⁸⁾	TO-220AC	1200	3	6	53	6 A, 200 A/us, 200 V	233
6	VS-HFA06TB120-N3^(A)	I	Power Plastic Through Hole ⁽¹⁾⁽⁷⁾	TO-220AC	1200	3	6	53	6 A, 200 A/us, 200 V	233
6	VS-HFA06PB120PBF	I	Power Plastic Through Hole ⁽¹⁾⁽⁸⁾	TO-247AC (mod)	1200	3	6	53	6 A, 200 A/us, 200 V	233
6	VS-HFA06PB120-N3^(A)	I	Power Plastic Through Hole ⁽¹⁾⁽⁷⁾	TO-247AC (mod)	1200	3	6	53	6 A, 200 A/us, 200 V	233
6	VS-HFA06TB120SxPBF^(A)	I	Power Plastic SMD ⁽¹⁾⁽³⁾⁽⁶⁾	TO-263AB (D ² PAK)	1200	3	6	53	6 A, 200 A/us, 200 V	233
8	VS-HFA08TA60CPBF	I	Power Plastic Through Hole ⁽²⁾⁽⁸⁾	TO-220AB	600	2.2	8	28	4 A, 200 A/us, 200 V	70
8	VS-HFA08TA60C-N3^(A)	I	Power Plastic Through Hole ⁽²⁾⁽⁷⁾	TO-220AB	600	2.2	8	28	4 A, 200 A/us, 200 V	70
8	VS-HFA08TB60PBF	I	Power Plastic Through Hole ⁽¹⁾⁽⁸⁾	TO-220AC	600	1.7	8	37	8 A, 200 A/us, 200 V	124
8	VS-HFA08TB60-N3^(A)	I	Power Plastic Through Hole ⁽¹⁾⁽⁷⁾	TO-220AC	600	1.7	8	37	8 A, 200 A/us, 200 V	124
8	VS-HFA08PB60PBF	I	Power Plastic Through Hole ⁽¹⁾⁽⁸⁾	TO-247AC (mod)	600	1.7	8	37	8 A, 200 A/us, 200 V	124
8	VS-HFA08PB60-N3^(A)	I	Power Plastic Through Hole ⁽¹⁾⁽⁷⁾	TO-247AC (mod)	600	1.7	8	37	8 A, 200 A/us, 200 V	124
8	VS-HFA08SD60SxPBF^(A)	I	Power Plastic SMD ⁽¹⁾⁽³⁾⁽⁹⁾	TO-252 (DPAK)	600	1.7	8	37	8 A, 200 A/us, 200 V	124
8	VS-HFA08SD60Sx-M3^(A)	I	Power Plastic SMD ⁽¹⁾⁽³⁾⁽⁶⁾	TO-252 (DPAK)	600	1.7	8	37	8 A, 200 A/us, 200 V	124
8	VS-HFA08TA60CSxPBF^(A)	I	Power Plastic SMD ⁽²⁾⁽³⁾⁽⁶⁾	TO-263AB (D ² PAK)	600	2.2	8	28	4 A, 200 A/us, 200 V	70
8	VS-HFA08TB60SxPBF^(A)	I	Power Plastic SMD ⁽¹⁾⁽³⁾⁽⁶⁾	TO-263AB (D ² PAK)	600	1.7	8	37	8 A, 200 A/us, 200 V	124
8	VS-HFA08TB120PBF	I	Power Plastic Through Hole ⁽¹⁾⁽⁸⁾	TO-220AC	1200	3.3	8	63	8 A, 200 A/us, 200 V	335
8	VS-HFA08TB120-N3^(A)	I	Power Plastic Through Hole ⁽¹⁾⁽⁷⁾	TO-220AC	1200	3.3	8	63	8 A, 200 A/us, 200 V	335
8	VS-HFA08PB120PBF	I	Power Plastic Through Hole ⁽¹⁾⁽⁸⁾	TO-247AC (mod)	1200	3.3	8	63	8 A, 200 A/us, 200 V	335
8	VS-HFA08PB120-N3^(A)	I	Power Plastic Through Hole ⁽¹⁾⁽⁷⁾	TO-247AC (mod)	1200	3.3	8	63	8 A, 200 A/us, 200 V	335

Note:

1. Single die device
2. Dual center-tapped device (V_F limit at I_F is per diode)
3. x designates tube or tape&reel version on SMD products
none = tube
TR = tape and reel centered (for DPAK only)
TRL = tape and reel left oriented
TRR = tape and reel right oriented

4. Source: I = formerly International Rectifier Diode unit
5. Bold text indicates new product
6. Halogen free mould compound and RoHs compliant
7. Halogen free mould compound and RoHs compliant and totally lead free
8. RoHs compliant and totally lead free
- A. Automotive Grade Device available on request



RECTIFIERS

Ultrafast Recovery Rectifiers



HEXFRED®, continued

I _{F(AV)} (A)	Device ⁽⁵⁾	Source ⁽⁴⁾	Package		V _(BR) Range (V)	Max V _F at I _F		Typ t _r at see setup (ns)	Typ Q _{rr} at see setup	
			Family	Type		(V)	(A)		setup (I _F , di _F /dt, V _R)	(nC)
8	VS-HFA08TB120SxPBF^(A)	I	Power Plastic SMD ⁽¹⁾⁽³⁾⁽⁶⁾	TO-263AB (D ² PAK)	1200	3.3	8	63	8 A, 200 A/us, 200 V	335
12	VS-HFA12PA120CPBF	I	Power Plastic Through Hole ⁽²⁾⁽⁸⁾	TO-247AC	1200	3.9	12	53	6 A, 200 A/us, 200 V	233
12	VS-HFA12PA120C-N3^(A)	I	Power Plastic Through Hole⁽²⁾⁽⁷⁾	TO-247AC	1200	3.9	12	53	6 A, 200 A/us, 200 V	233
15	VS-HFA15TB60PBF	I	Power Plastic Through Hole ⁽¹⁾⁽⁸⁾	TO-220AC	600	1.7	15	42	15 A, 200 A/us, 200 V	241
15	VS-HFA15TB60-N3^(A)	I	Power Plastic Through Hole⁽¹⁾⁽⁷⁾	TO-220AC	600	1.7	15	42	15 A, 200 A/us, 200 V	241
15	VS-HFA15PB60PBF	I	Power Plastic Through Hole (1)(8)	TO-247AC (mod)	600	1.7	15	42	15 A, 200 A/us, 200 V	241
15	VS-HFA15PB60-N3^(A)	I	Power Plastic Through Hole⁽¹⁾⁽⁷⁾	TO-247AC (mod)	600	1.7	15	42	15 A, 200 A/us, 200 V	241
15	VS-HFA15TB60-1PBF^(A)	I	Power Plastic Through Hole ⁽¹⁾⁽⁶⁾	TO-262 (I ² PAK)	600	1.7	15	42	15 A, 200 A/us, 200 V	241
15	VS-HFA15TB60SxPBF^(A)	I	Power Plastic SMD ⁽¹⁾⁽³⁾⁽⁶⁾	TO-263AB (D ² PAK)	600	1.7	15	50	15 A, 200 A/us, 200 V	241
16	VS-HFA16TA60CPBF	I	Power Plastic Through Hole ⁽²⁾⁽⁸⁾	TO-220AB	600	2.1	16	37	8 A, 200 A/us, 200 V	124
16	VS-HFA16TA60C-N3^(A)	I	Power Plastic Through Hole⁽²⁾⁽⁷⁾	TO-220AB	600	2.1	16	37	8 A, 200 A/us, 200 V	124
16	VS-HFA16PA60CPBF	I	Power Plastic Through Hole ⁽²⁾⁽⁸⁾	TO-247AC	600	2.1	16	37	8 A, 200 A/us, 200 V	124
16	VS-HFA16PA60C-N3^(A)	I	Power Plastic Through Hole⁽²⁾⁽⁷⁾	TO-247AC	600	2.1	16	37	8 A, 200 A/us, 200 V	124
16	VS-HFA16TA60CSxPBF^(A)	I	Power Plastic SMD ⁽²⁾⁽³⁾⁽⁶⁾	TO-263AB (D ² PAK)	600	2.1	16	37	8 A, 200 A/us, 200 V	124
16	VS-HFA16TB120PBF	I	Power Plastic Through Hole ⁽¹⁾⁽⁸⁾	TO-220AC	1200	3	16	90	16 A, 200 A/us, 200 V	680
16	VS-HFA16TB120-N3^(A)	I	Power Plastic Through Hole⁽¹⁾⁽⁷⁾	TO-220AC	1200	3	16	90	16 A, 200 A/us, 200 V	680
16	VS-HFA16PA120CPBF	I	Power Plastic Through Hole ⁽²⁾⁽⁸⁾	TO-247AC	1200	4.3	16	63	8 A, 200 A/us, 200 V	335
16	VS-HFA16PA120C-N3^(A)	I	Power Plastic Through Hole⁽²⁾⁽⁷⁾	TO-247AC	1200	4.3	16	63	8 A, 200 A/us, 200 V	335
16	VS-HFA16PB120PBF	I	Power Plastic Through Hole ⁽¹⁾⁽⁸⁾	TO-247AC (mod)	1200	3	16	90	16 A, 200 A/us, 200 V	680
16	VS-HFA16PB120-N3^(A)	I	Power Plastic Through Hole⁽¹⁾⁽⁷⁾	TO-247AC (mod)	1200	3	16	90	16 A, 200 A/us, 200 V	680
16	VS-HFA16TB120SxPBF^(A)	I	Power Plastic SMD ⁽¹⁾⁽³⁾⁽⁶⁾	TO-263AB (D ² PAK)	1200	3	16	90	16 A, 200 A/us, 200 V	680
25	VS-HFA25TB60PBF	I	Power Plastic Through Hole ⁽¹⁾⁽⁸⁾	TO-220AC	600	1.7	25	50	25 A, 200 A/us, 200 V	420
25	VS-HFA25TB60-N3^(A)	I	Power Plastic Through Hole⁽¹⁾⁽⁷⁾	TO-220AC	600	1.7	25	50	25 A, 200 A/us, 200 V	420
25	VS-HFA25PB60PBF	I	Power Plastic Through Hole ⁽¹⁾⁽⁸⁾	TO-247AC (mod)	600	1.7	25	50	25 A, 200 A/us, 200 V	420
25	VS-HFA25PB60-N3^(A)	I	Power Plastic Through Hole⁽¹⁾⁽⁷⁾	TO-247AC (mod)	600	1.7	25	50	25 A, 200 A/us, 200 V	420

Note:

1. Single die device
2. Dual center-tapped device (V_F limit at I_F is per diode)
3. x designates tube or tape&reel version on SMD products
none = tube
TR = tape and reel centered (for DPAK only)
TRL = tape and reel left oriented
TRR = tape and reel right oriented

4. Source: I = formerly International Rectifier Diode unit
5. Bold text indicates new product
6. Halogen free mould compound and RoHs compliant
7. Halogen free mould compound and RoHs compliant and totally lead free
8. RoHs compliant and totally lead free
- A. Automotive Grade Device available on request



RECTIFIERS

Ultrafast Recovery Rectifiers



HEXFRED®, continued

I _{F(AV)} (A)	Device ⁽⁵⁾	Source ⁽⁴⁾	Package		V _(BR) Range (V)	Max V _F at I _F		Typ t _r at see setup (ns)	Typ Q _{rr} at see setup	
			Family	Type		(V)	(A)		setup (I _F , di _F /dt, V _R)	(nC)
25	VS-HFA25TB60SxPBF^(A)	I	Power Plastic SMD ⁽¹⁾⁽³⁾⁽⁶⁾	TO-263AB (D ² PAK)	600	1.7	25	50	25 A, 200 A/us, 200 V	420
30	VS-HFA30TA60CPBF	I	Power Plastic Through Hole ⁽²⁾⁽⁸⁾	TO-220AB	600	2	30	42	15 A, 200 A/us, 200 V	220
30	VS-HFA30TA60-N3^(A)	I	Power Plastic Through Hole⁽²⁾⁽⁷⁾	TO-220AB	600	2	30	42	15 A, 200 A/us, 200 V	220
30	VS-HFA30PA60CPBF	I	Power Plastic Through Hole ⁽²⁾⁽⁸⁾	TO-247AC	600	2	30	42	15 A, 200 A/us, 200 V	220
30	VS-HFA30PA60C-N3^(A)	I	Power Plastic Through Hole⁽²⁾⁽⁷⁾	TO-247AC	600	2	30	42	15 A, 200 A/us, 200 V	220
30	VS-HFA30TA60CSxPBF^(A)	I	Power Plastic SMD ⁽²⁾⁽³⁾⁽⁶⁾	TO-263AB (D ² PAK)	600	2	30	42	15 A, 200 A/us, 200 V	220
30	VS-HFA30PB120PBF	I	Power Plastic Through Hole ⁽¹⁾⁽⁸⁾	TO-247AC (mod)	1200	4.1	30	110	30 A, 200 A/us, 200 V	1540
30	VS-HFA30PB120-N3^(A)	I	Power Plastic Through Hole⁽¹⁾⁽⁷⁾	TO-247AC (mod)	1200	4.1	30	110	30 A, 200 A/us, 200 V	1540
32	VS-HFA32PA120CPBF	I	Power Plastic Through Hole ⁽²⁾⁽⁸⁾	TO-247AC	1200	3.93	32	90	16 A, 200 A/us, 200 V	680
32	VS-HFA32PA120C-N3^(A)	I	Power Plastic Through Hole⁽²⁾⁽⁷⁾	TO-247AC	1200	3.93	32	90	16 A, 200 A/us, 200 V	680
50	VS-HFA50PA60CPBF	I	Power Plastic Through Hole ⁽²⁾⁽⁸⁾	TO-247AC	600	2	50	50	25 A, 200 A/us, 200 V	420
50	VS-HFA50PA60C-N3^(A)	I	Power Plastic Through Hole⁽²⁾⁽⁷⁾	TO-247AC	600	2	50	50	25 A, 200 A/us, 200 V	420

Note:

1. Single die device
2. Dual center-tapped device (V_F limit at I_F is per diode)
3. x designates tube or tape&reel version on SMD products
none = tube
TR = tape and reel centered (for DPAK only)
TRL = tape and reel left oriented
TRR = tape and reel right oriented

4. Source: I = formerly International Rectifier Diode unit
5. Bold text indicates new product
6. Halogen free mould compound and RoHs compliant
7. Halogen free mould compound and RoHs compliant and totally lead free
8. RoHs compliant and totally lead free
- A. Automotive Grade Device available on request



RECTIFIERS

Ultrafast Recovery Rectifiers



Ultrafast Avalanche Rated Sinterglass Diodes

Part Number	V_R V_{RRM} V_{RWM} (V)	I_{FAV} (A)	I_{FSM} at $t_p = 10$ ms (A)	V_F 25 °C (V)	At I_F (A)	I_R at T_j 25 °C (μ A)	I_R High Temp. (μ A)	At T_j (°C)	T_j, T_{STG} Min. (°C)	T_j, T_{STG} Max. (°C)	t_{rr} Max. (ns)	E_R (mJ)	At I_R (A)
BYT53A	50	1.9	50	1.1	1	5	200	150	- 55	175	50	20	1.0
BYT53B	100	1.9	50	1.1	1	5	200	150	- 55	175	50	20	1.0
BYT53C	150	1.9	50	1.1	1	5	200	150	- 55	175	50	20	1.0
BYT53D	200	1.9	50	1.1	1	5	200	150	- 55	175	50	20	1.0
BYT53F	300	1.9	50	1.1	1	5	200	150	- 55	175	50	20	1.0
BYT53G	400	1.9	50	1.1	1	5	200	150	- 55	175	50	20	1.0
BYV26A	200	1.0	30	2.5	1	5	100	150	- 55	175	30	10	1.0
BYV26B	400	1.0	30	2.5	1	5	100	150	- 55	175	30	10	1.0
BYV26C	600	1.0	30	2.5	1	5	100	150	- 55	175	30	10	1.0
BYV26D	800	1.0	30	2.5	1	5	100	150	- 55	175	75	10	1.0
BYV26E	1000	1.0	30	2.5	1	5	100	150	- 55	175	75	10	1.0
BYV27-50	50	2.0	50	1.07	3	1	150	165	- 55	175	25	20	1.0
BYV27-100	100	2.0	50	1.07	3	1	150	165	- 55	175	25	20	1.0
BYV27-150	150	2.0	50	1.07	3	1	150	165	- 55	175	25	20	1.0
BYV27-200	200	2.0	50	1.07	3	1	150	165	- 55	175	25	20	1.0
BYV27-600	600	2.0	50	1.35	3	5	150	150	- 55	175	40	10	0.4
BYV28-50	50	3.5	90	1.1	5	1	150	165	- 55	175	30	20	1.0
BYV28-100	100	3.5	90	1.1	5	1	150	165	- 55	175	30	20	1.0
BYV28-150	150	3.5	90	1.1	5	1	150	165	- 55	175	30	20	1.0
BYV28-200	200	3.5	90	1.1	5	1	150	165	- 55	175	30	20	1.0
BYV28-600	600	3.5	90	1.35	5	5	150	150	- 55	175	50	20	1.0
BYV98-50	100	4.0	70	1.1	5	10	200	150	- 55	175	35	20	1.0
BYV98-100	150	4.0	70	1.1	5	10	200	150	- 55	175	35	20	1.0
BYV98-150	150	4.0	70	1.1	5	10	200	150	- 55	175	35	20	1.0
BYV98-200	200	4.0	70	1.1	5	10	200	150	- 55	175	35	20	1.0
BYW178	800	3.0	80	1.9	3	1	20	100	- 55	175	60	20	0.4
SF1200	1200	1.0	30	3.4	1	5	50	125	- 55	175	75	10	0.4
SF1600	1600	1.0	30	3.4	1	5	50	125	- 55	175	75	10	0.4
SF4001	50	1.0	30	1.0	1	5	50	125	- 55	175	50	10	0.4
SF4002	100	1.0	30	1.0	1	5	50	125	- 55	175	50	10	0.4
SF4003	200	1.0	30	1.0	1	5	50	125	- 55	175	50	10	0.4
SF4004	400	1.0	30	1.0	1	5	50	125	- 55	175	50	10	0.4
SF4005	600	1.0	30	1.7	1	5	50	125	- 55	175	75	10	0.4
SF4006	800	1.0	30	1.7	1	5	50	125	- 55	175	75	10	0.4
SF4007	100	1.0	30	1.7	1	5	50	125	- 55	175	75	10	0.4
SF5400	50	3.0	150	1.1	3	5	50	125	- 55	175	50	10	0.4

Note:

 E_R = pulse energy in avalanche mode



RECTIFIERS

Ultrafast Recovery Rectifiers



Ultrafast Avalanche Rated Sinterglass Diodes, continued

Part Number	V_R V_{RRM} V_{RWM} (V)	I_{FAV} (A)	I_{FSM} at $t_p = 10$ ms (A)	V_F 25 °C (V)	At I_F (A)	I_R at T_j 25 °C (μ A)	I_R High Temp. (μ A)	At T_j (°C)	T_j , T_{STG} Min. (°C)	T_j , T_{STG} Max. (°C)	t_{rr} Max. (ns)	E_R (mJ)	At I_R (A)
SF5401	100	3.0	150	1.1	3	5	50	125	- 55	175	50	10	0.4
SF5402	200	3.0	150	1.1	3	5	50	125	- 55	175	50	10	0.4
SF5403	300	3.0	150	1.1	3	5	50	125	- 55	175	50	10	0.4
SF5404	400	3.0	150	1.1	3	5	50	125	- 55	175	50	10	0.4
SF5405	500	3.0	150	1.7	3	5	50	125	- 55	175	75	10	0.4
SF5406	600	3.0	150	1.7	3	5	50	125	- 55	175	75	10	0.4
SF5407	800	3.0	150	1.7	3	5	50	125	- 55	175	75	10	0.4
SF5408	1000	3.0	150	1.7	3	5	50	125	- 55	175	75	10	0.4

Note:
 E_R = pulse energy in avalanche mode



RECTIFIERS



Standard and Fast Recovery Rectifiers

Standard Rectifiers are for low-frequency general purpose use in consumer applications. Typical reverse recovery times are approximately 2 μ s. These products are offered with forward current ratings of 0.25 A to 8 A and reverse voltages as high as 4000 V. They are available in plastic, glass, and SUPERECTIFIER® constructions.

I _{F(AV)} (A)	Device ⁽¹⁾	Package		V _(BR) Range (V)	Max V _F at I _F	
		Family	Type		(V)	(A)
0.25	GL250-1 to GL250-4	SUPERECTIFIER Axial	DO-204AL (DO-41)	1000 to 4000	3.5	0.25
0.25	GP02-20 to GP02-40	SUPERECTIFIER Axial	DO-204AL (DO-41)	2000 to 4000	3.0	1.0
0.5	GL34A to GL34J	SUPERECTIFIER SMD	DO-213AA (MiniMELF)	50 to 600	1.2 / 1.3	0.5
0.8	GP08A to GP08J	SUPERECTIFIER Axial	DO-204AL (DO-41)	50 to 600	1.3	0.8
1.0	1N3611GP to 1N3614GP and 1N3957GP	SUPERECTIFIER Axial	DO-204AL (DO-41)	200 to 1000	1.0	1.0
1.0	1N4001 to 1N4007	Plastic Axial	DO-204AL (DO-41)	50 to 1000	1.1	1.0
1.0	1N4001GP to 1N4007GP	SUPERECTIFIER Axial	DO-204AL (DO-41)	50 to 1000	1.1	1.0
1.0	1N4245GP to 1N4249GP	SUPERECTIFIER Axial	DO-204AL (DO-41)	200 to 1000	1.2	1.0
1.0	1N4383GP to 1N4385GP	SUPERECTIFIER Axial	DO-204AC (DO-15)	200 to 600	1.0	1.0
1.0	1N4585GP and 1N4586GP	SUPERECTIFIER Axial	DO-204AC (DO-15)	800 to 1000	1.0	1.0
1.0	1N5059GP to 1N5062GP	SUPERECTIFIER Axial	DO-204AC (DO-15)	200 to 800	1.2	1.0
1.0	1N5614GP to 1N5622GP	SUPERECTIFIER Axial	DO-204AC (DO-15)	200 to 1000	1.2	1.0
1.0	1N6478 to 1N6484	SUPERECTIFIER SMD	DO-213AB (MELF)	50 to 1000	1.1	1.0
1.0	BYM10-50 to BYM10-1000	SUPERECTIFIER SMD	DO-213AB (MELF)	50 to 1000	1.1 / 1.2	1.0
1.0	GF1A to GF1M	SUPERECTIFIER SMD	DO-214BA (GF1)	50 to 1000	1.1 / 1.2	1.0
1.0	GL1-1200GP to GL1-1600GP	SUPERECTIFIER Axial	DO-204AC (DO-15)	1200 to 1600	1.1	1.0
1.0	GL41A to GL41Y	SUPERECTIFIER SMD	DO-213AB (MELF)	50 to 1600	1.1 / 1.2	1.0
1.0	GP10A to GP10Y	SUPERECTIFIER Axial	DO-204AL (DO-41)	50 to 1600	1.1 / 1.2 / 1.3	1.0
1.0	GP10AE to GP10YE	SUPERECTIFIER Axial	DO-204AL (DO-41)	50 to 1000	1.1 / 1.2 / 1.3	1.0
1.0	GPP10A to GPP10M	Plastic Axial ⁽²⁾	DO-204AL (DO-41)	50 to 1000	1.1	1.0
1.0	M100A to M100M	Plastic Axial	DO-204AL (DO-41)	50 to 1000	1.0 / 1.1	1.0
1.0	MPG06A to MPG06M	Plastic Axial ⁽²⁾	MPG06	50 to 1000	1.1	1.0
1.0	S1A to S1M	Plastic SMD ⁽²⁾	DO-214AC (SMA)	50 to 1000	1.1	1.0
1.0	S1PB to S1PM	Plastic SMD ⁽²⁾	DO-220AA (SMP)	100 to 1000	1.1	1.0
2.0	SA2B to SA2M	Plastic SMD ⁽²⁾	DO-214AC (SMA)	100 to 1000	1.1	2.0
1.5	1N5391 to 1N5399	Plastic Axial	DO-204AC (DO-15)	50 to 1000	1.4	1.5
1.5	1N5391GP to 1N5399GP	SUPERECTIFIER Axial	DO-204AC (DO-15)	50 to 1000	1.4	1.5
1.5	BY448GP	SUPERECTIFIER Axial	DO-204AC (DO-15)	1650	1.6	3.0
1.5	CGP15	SUPERECTIFIER Axial	DO-204AC (DO-15)	1400	1.1	1.0
1.5	DGP15	SUPERECTIFIER Axial	DO-204AC (DO-15)	1500	1.1	1.0
1.5	GP15A to GP15M	SUPERECTIFIER® Axial	DO-204AC (DO-15)	50 to 1000	1.1	1.5
1.5	S07D	SMF	DO-219AB	200	1.1	1.0
1.5	S07G	SMF	DO-219AB	400	1.1	1.0

Note:

1. Bold text indicates new product

"x" designates a number that indicates voltage or is part of a sequence

"y" designates reverse voltage, where:

A = 50 V, B = 100 V, C = 150 V, D = 200 V, F = 300 V, G = 400 V,

H = 500 V, J = 600 V, K = 800 V, M = 1000 V, N = 1100 V, Q = 1200 V,

T = 1300 V, V = 1400 V, W = 1500 V, and Y = 1600 V

2. Glass passivated die



RECTIFIERS

Standard and Fast Recovery Rectifiers



Standard Rectifiers, continued

$I_{F(AV)}$ (A)	Device ⁽¹⁾	Package		$V_{(BR)}$ Range (V)	Max V_F at I_F	
		Family	Type		(V)	(A)
1.5	S07J	SMF	DO-219AB	600	1.1	1.0
1.5	S07M	SMF	DO-219AB	1000	1.1	1.0
2.0	SB2D to SB2M	Plastic SMD⁽²⁾	DO-214AA (SMB)	200 to 1000	1.15	2.0
2.5	BY228GP	SUPERRECTIFIER [®] Axial	DO-201AD	1500	1.6	2.5
3.0	1N5400 to 1N5408	Plastic Axial	DO-201AD	50 to 1000	1.2	3.0
3.0	1N5624GP to 1N5627GP	SUPERRECTIFIER Axial	DO-201AD	200 to 800	1.0	3.0
3.0	BY251GP to BY255GP	SUPERRECTIFIER Axial	DO-201AD	200 to 1300	1.1	3.0
3.0	BY251P to BY255P	Plastic Axial	DO-201AD	200 to 1300	1.1	3.0
3.0	CGP30	SUPERRECTIFIER Axial	DO-201AD	1400	1.2	3.0
3.0	DGP30	SUPERRECTIFIER Axial	DO-201AD	1500	1.2	3.0
3.0	GP30A to GP30M	SUPERRECTIFIER Axial	DO-201AD	50 to 1000	1.1 / 1.2	3.0
3.0	GI500 to GI510	Plastic Axial	DO-201AD	50 to 1000	1.1	9.4
3.0	P300A to P300M	Plastic Axial	DO-201AD	50 to 1000	1.2	3.0
3.0	S3A to S3M	Plastic SMD ⁽²⁾	DO-214AB (SMC)	50 to 1000	1.15	2.5
4.0	S4PB to S4PM	Plastic SMD⁽²⁾	TO-277A (SMPC)	100 to 1000	1.10	4.0
5.0	S5A to S5M	Plastic SMD⁽²⁾	DO-214AB (SMC)	50 to 1000	1.15	5.0
5.0	S5MS	Plastic SMD⁽²⁾	DO-214AB (SMC)	1000	1.15	5.0
5.0	S5PMS	Plastic SMD⁽²⁾	TO-277A (SMPC)	1000	1.15	5.0
6.0	GI750 to GI758	Plastic Axial	P600	50 to 800	0.90 / 0.95	6.0
6.0	GPP60A to GPP60G	Plastic Axial⁽²⁾	P600	50 to 400	1.1	6.0
6.0	P600A to P600M	Plastic Axial	P600	50 to 1000	0.9 / 1.0	6.0
8.0	NS8AT to NS8MT	Plastic Power Pack ⁽²⁾	TO-220AC	50 to 1000	1.1	8.0
8.0	NSB8AT to NSB8MT	Power Pack SMD ⁽²⁾	TO-263AB (D ² PAK)	50 to 1000	1.1	8.0
8.0	NSF8AT to NSF8MT	Isolated Power Pack ⁽²⁾	ITO-220AC	50 to 1000	1.1	8.0

Note:

1. Bold text indicates new product

"x" designates a number that indicates voltage or is part of a sequence

"y" designates reverse voltage, where:

A = 50 V, B = 100 V, C = 150 V, D = 200 V, F = 300 V, G = 400 V,

H = 500 V, J = 600 V, K = 800 V, M = 1000 V, N = 1100 V, Q = 1200 V,

T = 1300 V, V = 1400 V, W = 1500 V, and Y = 1600 V

2. Glass passivated die



RECTIFIERS

Standard and Fast Recovery Rectifiers



Standard Avalanche Rated Sinterglass Diodes

Part Number	V_R V_{RRM} V_{RWM} (V)	I_{FAV} (A)	I_{FSM} at $t_p = 10$ ms (A)	V_F 25 °C (V)	At I_F (A)	I_R at T_j 25 °C (μ A)	I_R High Temp. (μ A)	At T_j (°C)	T_j, T_{STG} Min. (°C)	T_j, T_{STG} Max. (°C)	t_{rr} Max. (ns)	E_R (mJ)	At I_R (A)	C_D at $V_R = 4$ V
1N5059	200	2.0	50	1.0	1.0	1	100	150	- 55	175	4	20	1.0	18
1N5060	400	2.0	50	1.0	1.0	1	100	150	- 55	175	4	20	1.0	18
1N5061	600	2.0	50	1.0	1.0	1	100	150	- 55	175	4	20	1.0	18
1N5062	800	2.0	50	1.0	1.0	1	100	150	- 55	175	4	20	1.0	18
BY448	1500	2.0	30	1.6	3.0	3	140	140	- 55	175 ⁽¹⁾	2	10	0.4	—
BY458	1200	2.0	30	1.6	3.0	3	140	140	- 55	175 ⁽¹⁾	2	10	0.4	—
BY527	800	2.0	50	1.0	1.0	1	10	100	- 55	175	4	20	1.0	—
BYT51A	50	1.5	50	1.1	1.0	1	100	150	- 55	175	4	20	1.0	—
BYT51B	100	1.5	50	1.1	1.0	1	100	150	- 55	175	4	20	1.0	—
BYT51D	200	1.5	50	1.1	1.0	1	100	150	- 55	175	4	20	1.0	—
BYT51G	400	1.5	50	1.1	1.0	1	100	150	- 55	175	4	20	1.0	—
BYT51J	600	1.5	50	1.1	1.0	1	100	150	- 55	175	4	20	1.0	—
BYT51K	800	1.5	50	1.1	1.0	1	100	150	- 55	175	4	20	1.0	—
BYT51M	1000	1.5	50	1.1	1.0	1	100	150	- 55	175	4	20	1.0	—
BYT62	2400	0.35	10	3.0	0.2	5	250	175	- 55	190 ⁽²⁾	5	60	1.0	—
BY228	1500	3.0	50	1.5	5.0	5	140	140	- 55	175 ⁽¹⁾	2	10	0.4	—
BY228-13	1000	3.0	50	1.5	5.0	5	140	140	- 55	175 ⁽¹⁾	2	10	0.4	—
BY228-15	1200	3.0	50	1.5	5.0	5	140	140	- 55	175 ⁽¹⁾	2	10	0.4	—
BYW52	200	2.0	50	1.0	1.0	1	10	100	- 55	175	4	20	1.0	—
BYW53	400	2.0	50	1.0	1.0	1	10	100	- 55	175	4	20	1.0	—
BYW54	600	2.0	50	1.0	1.0	1	10	100	- 55	175	4	20	1.0	—
BYW55	800	2.0	50	1.0	1.0	1	10	100	- 55	175	4	20	1.0	—
BYW56	1000	2.0	50	1.0	1.0	1	10	100	- 55	175	4	20	1.0	—
BYW82	200	3.0	100	1.0	3.0	1	10	100	- 55	175	4	20	1.0	—
BYW83	400	3.0	100	1.0	3.0	1	10	100	- 55	175	4	20	1.0	—
BYW84	600	3.0	100	1.0	3.0	1	10	100	- 55	175	4	20	1.0	—
BYW85	800	3.0	100	1.0	3.0	1	10	100	- 55	175	4	20	1.0	—
BYW86	1000	3.0	100	1.0	3.0	1	10	100	- 55	175	4	20	1.0	—
BYX82	200	2.0	50	1.0	1.0	1	25	100	- 55	175	4	—	—	—
BYX83	400	2.0	50	1.0	1.0	1	25	100	- 55	175	4	—	—	—
BYX84	600	2.0	50	1.0	1.0	1	25	100	- 55	175	4	—	—	—
BYX85	800	2.0	50	1.0	1.0	1	25	100	- 55	175	4	—	—	—
BYX86	1000	2.0	50	1.0	1.0	1	25	100	- 55	175	4	—	—	—
S330D	1000	2.0	50	1.65	10.0	5	50	100	- 55	175	4	20	1.0	—

Note:

 E_R = pulse energy in avalanche mode1. $T_j = 140$ °C2. $T_j = 175$ °C



RECTIFIERS

Standard and Fast Recovery Rectifiers



High-Voltage Standard Recovery Diodes – Plastics

$I_{F(AV)}$ (A)	Device ⁽³⁾⁽⁵⁾	Source ⁽⁴⁾	Package		$V_{(BR)}$ Range (V)	Max V_F at I_F	
			Family	Type		(V)	(A)
8.0	VS-8EWS02SxPBF and VS-8EWS12SxPBF	I	Power Plastic SMD ⁽²⁾	TO-252 (DPAK)	800 - 1200	1.10	8.0
8.0	VS-8EWS02Sx-M3 and VS-8EWS12Sx-M3⁽⁶⁾	I	Power Plastic SMD ⁽²⁾	TO-252 (DPAK)	800 - 1200	1.10	8.0
8.0	VS-8EWS16SxPBF	I	Power Plastic SMD ⁽²⁾	TO-252 (DPAK)	1600	1.10	8.0
8.0	VS-8EWS16Sx-M3⁽⁶⁾	I	Power Plastic SMD ⁽²⁾	TO-252 (DPAK)	1600	1.10	8.0
10.0	VS-10ETS08PBF and VS-10ETS12PBF	I	Power Plastic Through Hole ⁽²⁾	TO-220AC	800 - 1200	1.10	10.0
10.0	VS-10ETS08-M3 and VS-10ETS12-M3⁽⁶⁾	I	Power Plastic Through Hole ⁽²⁾	TO-220AC	800 - 1200	1.10	10.0
10.0	VS-10ETS08FPPBF and VS-10ETS12FPPBF	I	Power Plastic Through Hole ⁽²⁾	TO-220AC FULL-PAK	800 - 1200	1.10	10.0
10.0	VS-10ETS08FP-M3 and VS-10ETS12FP-M3⁽⁶⁾	I	Power Plastic Through Hole ⁽²⁾	TO-220AC FULL-PAK	800 - 1200	1.10	10.0
10.0	VS-10ETS08SxPBF⁽⁶⁾ to VS-10ETS12SxPBF⁽⁶⁾	I	Power Plastic SMD ⁽²⁾⁽⁶⁾	TO-263AB (D ² PAK)	800 - 1200	1.10	10
20.0	VS-20ETS08PBF and VS-20ETS12PBF	I	Power Plastic Through Hole ⁽²⁾	TO-220AC	800 - 1200	1.10	20.0
20.0	VS-20ETS08-M3 and VS-20ETS12-M3⁽⁶⁾	I	Power Plastic Through Hole ⁽²⁾	TO-220AC	800 - 1200	1.10	20.0
20.0	VS-20ETS16PBF	I	Power Plastic Through Hole ⁽²⁾	TO-220AC	1600	1.10	20.0
20.0	VS-20ETS16-M3⁽⁶⁾	I	Power Plastic Through Hole ⁽²⁾	TO-220AC	1600	1.10	20.0
20.0	VS-20ATS08PBF and VS-20ATS12PBF	I	Power Plastic Through Hole ⁽²⁾	TO-220AB	800 - 1200	1.10	20.0
20.0	VS-20ATS08-M3 and VS-20ATS12-M3⁽⁶⁾	I	Power Plastic Through Hole ⁽²⁾	TO-220AB	800 - 1200	1.10	20.0
20.0	VS-20ETS08FPPBF and VS-20ETS12FPPBF	I	Power Plastic Through Hole ⁽²⁾	TO-220AC FULL-PAK	800 - 1200	1.10	20.0
20.0	VS-20ETS08FP-M3 and VS-20ETS12FP-M3⁽⁶⁾	I	Power Plastic Through Hole ⁽²⁾	TO-220AC FULL-PAK	800 - 1200	1.10	20.0
20.0	VS-20ETS08SxPBF⁽⁶⁾ to VS-20ETS12SxPBF⁽⁶⁾	I	Power Plastic SMD ⁽²⁾⁽⁶⁾	TO-263AB (D ² PAK)	800 - 1200	1.10	20
25.0	VS-25ETS08SxPBF⁽⁶⁾ to VS-25ETS12SxPBF⁽⁶⁾	I	Power Plastic SMD ⁽²⁾⁽⁶⁾	TO-263AB (D ² PAK)	800 - 1200	1.14	25
40.0	VS-40EPS08PBF and VS-40EPS12PBF	I	Power Plastic Through Hole ⁽²⁾	TO-247AC modified (2 pins)	800 - 1200	1.10	40.0
40.0	VS-40EPS08-M3 and VS-40EPS12-M3⁽⁶⁾	I	Power Plastic Through Hole ⁽²⁾	TO-247AC modified (2 pins)	800 - 1200	1.10	40.0
40.0	VS-40EPS16PBF	I	Power Plastic Through Hole ⁽²⁾	TO-247AC modified (2 pins)	1600	1.14	40.0
40.0	VS-40EPS16-M3⁽⁶⁾	I	Power Plastic Through Hole ⁽²⁾	TO-247AC modified (2 pins)	1600	1.14	40.0
60.0	VS-60EPS08PBF and VS-60EPS12PBF	I	Power Plastic Through Hole ⁽²⁾	TO-247AC modified (2 pins)	800 - 1200	1.09	60.0

Note:

1. Dual center-tapped device (V_F limit at I_F is per diode)
2. Single die device
3. x designates tube or tape&reel version on SMD products
none = tube
TR = tape and reel centered (for DPAK only)
TRL = tape and reel left oriented
TRR = tape and reel right oriented

4. Source: I = formerly International Rectifier Diode unit
5. Bold text indicates new product
6. Halogen free



RECTIFIERS

Standard and Fast Recovery Rectifiers



High-Voltage Standard Recovery Diodes – Plastics, continued

$I_{F(AV)}$ (A)	Device ⁽³⁾⁽⁵⁾	Source ⁽⁴⁾	Package		$V_{(BR)}$ Range (V)	Max V_F at I_F	
			Family	Type		(V)	(A)
60.0	VS-60EPS08-M3 and VS-60EPS12-M3⁽⁶⁾	I	Power Plastic Through Hole ⁽²⁾	TO-247AC modified (2 pins)	800 - 1200	1.09	60.0
60.0	VS-60EPS16PBF	I	Power Plastic Through Hole ⁽²⁾	TO-247AC modified (2 pins)	1600	1.07	60.0
60.0	VS-60EPS16-M3⁽⁶⁾	I	Power Plastic Through Hole ⁽²⁾	TO-247AC modified (2 pins)	1600	1.07	60.0
80.0	VS-80APS08PBF and VS-80APS12PBF	I	Power Plastic Through Hole ⁽²⁾	TO-247AC modified (2 pins)	800 - 1200	1.17	80.0
80.0	VS-80APS08-M3 and VS-80APS12-M3⁽⁶⁾	I	Power Plastic Through Hole ⁽²⁾	TO-247AC modified (2 pins)	800 - 1200	1.17	80.0
80.0	VS-80APS16PBF	I	Power Plastic Through Hole ⁽²⁾	TO-247AC modified (2 pins)	1600	1.17	80.0
80.0	VS-80APS16-M3⁽⁶⁾	I	Power Plastic Through Hole ⁽²⁾	TO-247AC modified (2 pins)	1600	1.17	80.0

Note:

1. Dual center-tapped device (V_F limit at I_F is per diode)
2. Single die device
3. x designates tube or tape&reel version on SMD products
none = tube
TR = tape and reel centered (for DPAK only)
TRL = tape and reel left oriented
TRR = tape and reel right oriented

4. Source: I = formerly International Rectifier Diode unit
5. Bold text indicates new product
6. Halogen free



RECTIFIERS

Standard and Fast Recovery Rectifiers



ESD Capability Rectifiers (Standard)

$I_{F(AV)}$ (A)	Device ⁽¹⁾⁽³⁾	Package		$V_{(BR)}$ Range (V)	Max V_F at I_F	
		Family	Type		(V)	(A)
0.7	SE07PB to SE07PJ	Plastic SMD ⁽²⁾	DO-220AA (SMP)	100 to 600	1.05	0.7
1.0	SE10PB to SE10PJ	Plastic SMD ⁽²⁾	DO-220AA (SMP)	100 to 600	1.05	1.0
1.0	MSE1PB to MSE1PJ	Plastic SMD ⁽²⁾	MicroSMP	100 to 600	1.10	1.0
1.5	SE15PB to SE15PJ	Plastic SMD ⁽²⁾	DO-220AA (SMP)	100 to 600	1.05	1.5

Note:

1. Bold text indicates new product
Reverse voltage, where: A = 50 V, B = 100 V, C = 150 V, D = 200 V,
F = 300 V, G = 400 V, H = 500 V, J = 600 V
2. Oxide planar die

3. Accordance with IEC61000-4-2, Human body model (contact mode):
> 8 kV, Human body model (air-discharge mode): >15 kV



RECTIFIERS



Standard and Fast Recovery Rectifiers

Fast Recovery Rectifiers

are used for applications requiring reverse recovery times in the range of 100 ns to 750 ns. Typical uses are low-frequency SMPS, motor controllers, and electronic ballasts. These products are offered in axial, surface-mount, and power packages.

$I_{F(AV)}$ (A)	Device ⁽¹⁾	Package		$V_{(BR)}$ Range (V)	Max V_F at I_F		T_{rr} (ns)
		Family	Type		(V)	(A)	
0.5	GHR16	Plastic Axial	R-1 (Pho-flash diode)	1600	1.5	0.5	300
0.5	RGL34A to RGL34K	SUPERRECTIFIER [®] SMD	DO-213AA (MiniMELF)	50 to 600	1.3	0.5	150 to 250
0.5	RGP02-12E to RGP02-20E	SUPERRECTIFIER Axial	DO-204AL (DO-41)	1200 to 2000	1.8	0.1	300
1.0	1N4933 to 1N4937	Plastic Axial	DO-204AL (DO-41)	50 to 600	1.2	1.0	200
1.0	1N4933GP to 1N4937GP	SUPERRECTIFIER Axial	DO-204AL (DO-41)	50 to 600	1.2	1.0	200
1.0	1N4942GP to 1N4948GP	SUPERRECTIFIER Axial	DO-204AL (DO-41)	200 to 1000	1.3	1.0	150 to 500
1.0	1N5615GP to 1N5623GP	SUPERRECTIFIER Axial	DO-204AC (DO-15)	200 to 1000	1.2	1.0	150 to 500
1.0	BA157 to BA159	Plastic Axial	DO-204AL (DO-41)	400 to 1000	1.3	1.0	150 to 500
1.0	BA157GP to BA159GP	SUPERRECTIFIER Axial	DO-204AL (DO-41)	400 to 1000	1.3	1.0	150 to 500
1.0	BYM11-50 to BYM11-1000	SUPERRECTIFIER SMD	DO-213AB (MELF)	50 to 1000	1.3	1.0	150 to 500
1.0	GI810 to GI818	SUPERRECTIFIER Axial	DO-204AC (DO-15)	50 to 1000	1.2	1.0	750
1.0	RGF1A to RGF1M	SUPERRECTIFIER SMD	DO-214BA (GF1)	50 to 1000	1.3	1.0	150 to 500
1.0	RGL41A to RGL41M	SUPERRECTIFIER SMD	DO-213AB (MELF)	50 to 1000	1.3	1.0	150 to 500
1.0	RGP10A to RGP10M	SUPERRECTIFIER Axial	DO-204AL (DO-41)	50 to 1000	1.3	1.0	150 to 500
1.0	RGP10AE to RGP10ME	SUPERRECTIFIER Axial	DO-204AL (DO-41)	50 to 1000	1.3	1.0	150 to 500
1.0	RMPG06A to RMPG06K	Plastic Axial ⁽²⁾	MPG06	50 to 800	1.3	1.0	150 to 250
1.0	RS1A to RS1K	Plastic SMD ⁽²⁾	DO-214AC (SMA)	50 to 800	1.3	1.0	150 to 500
1.0	RS1PB to RS1PJ	Plastic SMD⁽²⁾	DO-220AA (SMP)	100 to 600	1.3	1.0	150 to 250
1.0	SRP100A to SRP100K	Plastic Axial	DO-204AL (DO-41)	50 to 800	1.3	1.0	100 to 200
1.4	RS07B	SMF	DO-219AB	100	1.15	0.7	150
1.4	RS07D	SMF	DO-219AB	200	1.15	0.7	150
1.4	RS07G	SMF	DO-219AB	400	1.15	0.7	150
1.4	RS07J	SMF	DO-219AB	600	1.15	0.7	250
1.4	RS07K	SMF	DO-219AB	800	1.3	1.0	300
1.5	BYG21K and BYG21M	Plastic SMD ⁽²⁾	DO-214AC (SMA)	800 to 1000	1.5 / 1.6	1.0 / 1.5	120
1.5	BYG24D to BYG24J	Plastic SMD ⁽²⁾	DO-214AC (SMA)	200 to 600	1.15 / 1.25	1.0 / 1.5	140
1.5	RGP15A to RGP15M	SUPERRECTIFIER Axial	DO-204AC (DO-15)	50 to 1000	1.3	1.5	150 to 500
1.5	RS2A to RS2K	Plastic SMD ⁽²⁾	DO-214AA (SMB)	50 to 800	1.3	1.5	150 to 500
2.0	BY296P to BY299P	Plastic Axial	DO-201AD	100 to 800	1.3	3.0	500
2.5	RGP25A to RGP25M	SUPERRECTIFIER Axial	DO-201AD	50 to 1000	1.3	2.5	150 to 500
3.0	BY396P to BY399P	Plastic Axial	DO-201AD	100 to 800	1.25	3.0	500
3.0	GI850 to GI856	Plastic Axial	DO-201AD	50 to 600	1.25	3.0	200
3.0	GI910 to GI917	Plastic Axial	DO-201AD	50 to 800	1.25	3.0	750
3.0	RGP30A to RGP30M	SUPERRECTIFIER [®] Axial	DO-201AD	50 to 1000	1.3	3.0	150 to 500

Note:

1. Bold text indicates new product
2. Glass passivated die



RECTIFIERS



Standard and Fast Recovery Rectifiers

Fast Recovery Rectifiers, continued

$I_{F(AV)}$ (A)	Device ⁽¹⁾	Package		$V_{(BR)}$ Range (V)	Max V_F at I_F		T_{rr} (ns)
		Family	Type		(V)	(A)	
3.0	RS3A to RS3K	Plastic SMD ⁽²⁾	DO-214AB (SMC)	50 to 800	1.3	2.5	150 to 500
3.0	SRP300A to SRP300K	Plastic Axial	DO-201AD	50 to 800	1.3	3.0	100 to 200
5.0	BY500-100 to BY500-800	Plastic Axial	DO-201AD	100 to 800	1.35	5.0	200
5.0	GI820 to GI828	Plastic Axial	P600	50 to 800	1.1	5.0	200
6.0	SRP600A to SRP600K	Plastic Axial	P600	50 to 800	1.3	6.0	100 to 200
8.0	BY229-200 to BY229-800	Plastic Power Pack ⁽²⁾	TO-220AC	200 to 800	1.85	20.0	145
8.0	BY229X-200 to BY229X-800	Isolated Power Pack ⁽²⁾	ITO-220AC	200 to 800	1.85	20.0	145
8.0	BY229B-200 to BY229B-800	Power Pack SMD ⁽²⁾	TO-263AB (D ² PAK)	200 to 800	1.85	20.0	145

Note:

1. Bold text indicates new product
2. Glass passivated die



RECTIFIERS

Standard and Fast Recovery Rectifiers



Fast Soft Recovery Rectifiers

$I_{F(AV)}$ (A)	Device ⁽³⁾⁽⁵⁾	Source ⁽⁴⁾	Package		$V_{(BR)}$ Range (V)	Max V_F at I_F		Typ t_{rr} at see setup (ns)	Typ Q_{rr} at see setup	
			Family	Type		(V)	(A)		setup (I_F , di_F/dt , V_R)	(nC)
8.0	VS-8EWF02SxPBF to VS-8EWS06SxPBF	I	Power Plastic SMD ⁽²⁾	TO-252 (DPAK)	200 - 600	1.2	8	140	8 A, 25 A/us	0.25
8.0	VS-8EWF02Sx-M3 to VS-8EWS06Sx-M3⁽⁶⁾	I	Power Plastic SMD ⁽²⁾	TO-252 (DPAK)	200 - 600	1.2	8	140	8 A, 25 A/us	0.25
8.0	VS-8EWF10SxPBF and VS-8EWS12SxPBF	I	Power Plastic SMD ⁽²⁾	TO-252 (DPAK)	1000 - 1200	1.3	8	270	8 A, 25 A/us	1
8.0	VS-8EWF10Sx-M3 and VS-8EWS12Sx-M3⁽⁶⁾	I	Power Plastic SMD ⁽²⁾	TO-252 (DPAK)	1000 - 1200	1.3	8	270	8 A, 25 A/us	1
10.0	VS-10ETF02PBF to VS-10ETF06PBF	I	Power Plastic Through Hole ⁽²⁾	TO-220AC	200 - 600	1.2	10	145	10 A, 25 A/us	0.32
10.0	VS-10ETF02-M3⁽⁶⁾ to VS-10ETF06-M3⁽⁶⁾	I	Power Plastic Through Hole ⁽²⁾	TO-220AC	200 - 600	1.2	10	145	10 A, 25 A/us	0.32
10.0	VS-10ETF10PBF and VS-10ETF12PBF	I	Power Plastic Through Hole ⁽²⁾	TO-220AC	1000 - 1200	1.33	10	310	10 A, 25 A/us	1.05
10.0	VS-10ETF10-M3⁽⁶⁾ and VS-10ETF12-M3⁽⁶⁾	I	Power Plastic Through Hole ⁽²⁾	TO-220AC	1000 - 1200	1.33	10	310	10 A, 25 A/us	1.05
10.0	VS-10ETF02FPPBF to VS-10ETF06FPPBF	I	Power Plastic Through Hole ⁽²⁾	TO-220AC FULL-PAK	200 - 600	1.2	10	145	10 A, 25 A/us	0.32
10.0	VS-10ETF02FP-M3⁽⁶⁾ to VS-10ETF06FP-M3⁽⁶⁾	I	Power Plastic Through Hole ⁽²⁾	TO-220AC FULL-PAK	200 - 600	1.2	10	145	10 A, 25 A/us	0.32
10.0	VS-10ETF10FPPBF and VS-10ETF12FPPBF	I	Power Plastic Through Hole ⁽²⁾	TO-220AC FULL-PAK	1000 - 1200	1.33	10	310	10 A, 25 A/us	1.05
10.0	VS-10ETF10FPPBF⁽⁶⁾ and VS-10ETF12FPPBF⁽⁶⁾	I	Power Plastic Through Hole ⁽²⁾	TO-220AC FULL-PAK	1000 - 1200	1.33	10	310	10 A, 25 A/us	1.05
10.0	VS-10ETF02SxPBF⁽⁶⁾ to VS-10ETF06SxPBF⁽⁶⁾	I	Power Plastic SMD ⁽²⁾⁽⁶⁾	TO-263AB (D ² PAK)	200 - 600	1.2	10	145	10 A, 25 A/us	0.32
10.0	VS-10ETF10SxPBF⁽⁶⁾ and VS-10ETF12SxPBF⁽⁶⁾	I	Power Plastic SMD ⁽²⁾⁽⁶⁾	TO-263AB (D ² PAK)	1000 - 1200	1.33	10	310	10 A, 25 A/us	1.05
20.0	VS-20ETF02PBF to VS-20ETF06PBF	I	Power Plastic Through Hole ⁽²⁾	TO-220AC	200 - 600	1.3	20	160	20 A, 100 A/us	1.25
20.0	VS-20ETF02-M3⁽⁶⁾ to VS-20ETF06-M3⁽⁶⁾	I	Power Plastic Through Hole ⁽²⁾	TO-220AC	200 - 600	1.3	20	160	20 A, 100 A/us	1.25
20.0	VS-20ETF08PBF to VS-20ETF12PBF	I	Power Plastic Through Hole ⁽²⁾	TO-220AC	800 - 1200	1.31	20	400	20 A, 25 A/us	1.7
20.0	VS-20ETF08-M3⁽⁶⁾ to VS-20ETF12-M3⁽⁶⁾	I	Power Plastic Through Hole ⁽²⁾	TO-220AC	800 - 1200	1.31	20	400	20 A, 25 A/us	1.7

Note:

1. Dual center-tapped device (V_F limit at I_F is per diode)
2. Single die device
3. x designates tube or tape&reel version on SMD products
none = tube
TR = tape and reel centered (for DPAK only)
TRL = tape and reel left oriented
TRR = tape and reel right oriented

4. Source: I = formerly International Rectifier Diode unit
5. Bold text indicates new product
6. Halogen free



RECTIFIERS

Standard and Fast Recovery Rectifiers



Fast Soft Recovery Rectifiers, continued

I _{F(AV)} (A)	Device ⁽³⁾⁽⁵⁾	Source ⁽⁴⁾	Package		V _(BR) Range (V)	Max V _F at I _F		Typ t _{rr} at see setup		Typ Q _{rr} at see setup	
			Family	Type		(V)	(A)	(ns)	setup (I _F , di _F /dt, V _R)	(nC)	
20.0	VS-20ETF02FPPBF to VS-20ETF06FPPBF	I	Power Plastic Through Hole ⁽²⁾	TO-220AC FULL-PAK	200 - 600	1.3	20	160	20 A, 100 A/us	1.25	
20.0	VS-20ETF02FP-M3⁽⁶⁾ to VS-20ETF06FP-M3⁽⁶⁾	I	Power Plastic Through Hole ⁽²⁾	TO-220AC FULL-PAK	200 - 600	1.3	20	160	20 A, 100 A/us	1.25	
20.0	VS-20ETF10FPPBF and VS-20ETF12FPPBF	I	Power Plastic Through Hole ⁽²⁾	TO-220AC FULL-PAK	1000 - 1200	1.31	20	400	20 A, 25 A/us	1.7	
20.0	VS-20ETF10FP-M3⁽⁶⁾ and VS-20ETF12FP-M3⁽⁶⁾	I	Power Plastic Through Hole ⁽²⁾	TO-220AC FULL-PAK	1000 - 1200	1.31	20	400	20 A, 25 A/us	1.7	
20.0	VS-20ETF02SxPBF⁽⁶⁾ to VS-20ETF06SxPBF⁽⁶⁾	I	Power Plastic SMD ⁽²⁾⁽⁶⁾	TO-263AB (D ² PAK)	200 - 600	1.3	20	160	20 A, 100 A/us	1.25	
20.0	VS-20ETF08SxPBF⁽⁶⁾ to VS-20ETF12SxPBF⁽⁶⁾	I	Power Plastic SMD ⁽²⁾⁽⁶⁾	TO-263AB (D ² PAK)	800 - 1200	1.31	20	400	20 A, 25 A/us	1.7	
30.0	VS-30APF02PBF to VS-30APF06PBF	I	Power Plastic Through Hole ⁽²⁾	TO-247AC	200 - 600	1.41	30	160	20 A, 100 A/us	1.25	
30.0	VS-30APF02-M3⁽⁶⁾ to VS-30APF06-M3⁽⁶⁾	I	Power Plastic Through Hole ⁽²⁾	TO-247AC	200 - 600	1.41	30	160	20 A, 100 A/us	1.25	
30.0	VS-30EPF02PBF to VS-30EPF06PBF	I	Power Plastic Through Hole ⁽²⁾	TO-247AC modified (2 pins)	200 - 600	1.41	30	160	20 A, 100 A/us	1.25	
30.0	VS-30EPF02-M3⁽⁶⁾ to VS-30EPF06-M3⁽⁶⁾	I	Power Plastic Through Hole ⁽²⁾	TO-247AC modified (2 pins)	200 - 600	1.41	30	160	20 A, 100 A/us	1.25	
30.0	VS-30APF10PBF and VS-30APF12PBF	I	Power Plastic Through Hole ⁽²⁾	TO-247AC	1000 - 1200	1.41	30	450	30 A, 25 A/us	2.16	
30.0	VS-30APF10-M3⁽⁶⁾ and VS-30APF12-M3⁽⁶⁾	I	Power Plastic Through Hole ⁽²⁾	TO-247AC	1000 - 1200	1.41	30	450	30 A, 25 A/us	2.16	
30.0	VS-30EPF10PBF and VS-30EPF12PBF	I	Power Plastic Through Hole ⁽²⁾	TO-247AC modified (2 pins)	1000 - 1200	1.41	30	450	30 A, 25 A/us	2.16	
30.0	VS-30EPF10-M3⁽⁶⁾ and VS-30EPF12-M3⁽⁶⁾	I	Power Plastic Through Hole ⁽²⁾	TO-247AC modified (2 pins)	1000 - 1200	1.41	30	450	30 A, 25 A/us	2.16	
40.0	VS-40EPF02PBF to VS-40EPF06PBF	I	Power Plastic Through Hole ⁽²⁾	TO-247AC modified (2 pins)	200 - 600	1.25	40	180	40 A, 25 A/us	0.5	
40.0	VS-40EPF02-M3⁽⁶⁾ to VS-40EPF06-M3⁽⁶⁾	I	Power Plastic Through Hole ⁽²⁾	TO-247AC modified (2 pins)	200 - 600	1.25	40	180	40 A, 25 A/us	0.5	

Note:

1. Dual center-tapped device (V_F limit at I_F is per diode)
2. Single die device
3. x designates tube or tape&reel version on SMD products
none = tube
TR = tape and reel centered (for DPAK only)
TRL = tape and reel left oriented
TRR = tape and reel right oriented

4. Source: I = formerly International Rectifier Diode unit
5. Bold text indicates new product
6. Halogen free



RECTIFIERS

Standard and Fast Recovery Rectifiers



Fast Soft Recovery Rectifiers, continued

$I_{F(AV)}$ (A)	Device ⁽³⁾⁽⁵⁾	Source ⁽⁴⁾	Package		$V_{(BR)}$ Range (V)	Max V_F at I_F		Typ t_r at see setup (ns)	Typ Q_r at see setup	
			Family	Type		(V)	(A)		setup (I_F , di_F/dt , V_R)	(nC)
40.0	VS-40EPF10PBF and VS-40EPF12PBF	I	Power Plastic Through Hole ⁽²⁾	TO-247AC modified (2 pins)	1000 - 1200	1.4	40	450	10 A, 25 A/us	1.8
40.0	VS-40EPF10-M3⁽⁶⁾ and VS-40EPF12-M3⁽⁶⁾	I	Power Plastic Through Hole ⁽²⁾	TO-247AC modified (2 pins)	1000 - 1200	1.4	40	450	10 A, 25 A/us	1.8
60.0	VS-60APF02PBF to VS-60CPF06PBF	I	Power Plastic Through Hole ⁽²⁾	TO-247AC	200 - 600	1.3	60	180	60 A, 25 A/us	0.5
60.0	VS-60APF02-M3⁽⁶⁾ to VS-60CPF06-M3⁽⁶⁾	I	Power Plastic Through Hole ⁽²⁾	TO-247AC	200 - 600	1.3	60	180	60 A, 25 A/us	0.5
60.0	VS-60EPF02PBF to VS-60EPF06PBF	I	Power Plastic Through Hole ⁽²⁾	TO-247AC modified (2 pins)	200 - 600	1.3	60	180	60 A, 25 A/us	0.5
60.0	VS-60EPF02-M3⁽⁶⁾ to VS-60EPF06-M3⁽⁶⁾	I	Power Plastic Through Hole ⁽²⁾	TO-247AC modified (2 pins)	200 - 600	1.3	60	180	60 A, 25 A/us	0.5
60.0	VS-60APF10PBF and VS-60APF12PBF	I	Power Plastic Through Hole ⁽²⁾	TO-247AC	1000 - 1200	1.4	60	480	60 A, 25 A/us	2.7
60.0	VS-60APF10-M3⁽⁶⁾ and VS-60APF12-M3⁽⁶⁾	I	Power Plastic Through Hole ⁽²⁾	TO-247AC	1000 - 1200	1.4	60	480	60 A, 25 A/us	2.7
60.0	VS-60EPF10PBF and VS-60EPF12PBF	I	Power Plastic Through Hole ⁽²⁾	TO-247AC modified (2 pins)	1000 - 1200	1.4	60	480	60 A, 25 A/us	2.7
60.0	VS-60EPF10-M3⁽⁶⁾ and VS-60EPF12-M3⁽⁶⁾	I	Power Plastic Through Hole ⁽²⁾	TO-247AC modified (2 pins)	1000 - 1200	1.4	60	480	60 A, 25 A/us	2.7
80.0	VS-80APF02PBF to VS-80EPF06PBF	I	Power Plastic Through Hole ⁽²⁾	TO-247AC	200 - 600	1.25	80	190	40 A, 25 A/us	0.5
80.0	VS-80APF02-M3⁽⁶⁾ to VS-80EPF06-M3⁽⁶⁾	I	Power Plastic Through Hole ⁽²⁾	TO-247AC	200 - 600	1.25	80	190	40 A, 25 A/us	0.5
80.0	VS-80APF10PBF and VS-80EPF12PBF	I	Power Plastic Through Hole ⁽²⁾	TO-247AC	1000 - 1200	1.35	80	480	80 A, 25 A/us	2.1
80.0	VS-80APF10-M3⁽⁶⁾ and VS-80EPF12-M3⁽⁶⁾	I	Power Plastic Through Hole ⁽²⁾	TO-247AC	1000 - 1200	1.35	80	480	80 A, 25 A/us	2.1
85.0	VS-85EPF12		Power Plastic Through Hole ⁽²⁾	POWERTAB™	1200	1.36	85	480	85 A, 25 A/us	2.1

Note:

1. Dual center-tapped device (V_F limit at I_F is per diode)
2. Single die device
3. x designates tube or tape&reel version on SMD products
none = tube
TR = tape and reel centered (for DPAK only)
TRL = tape and reel left oriented
TRR = tape and reel right oriented

4. Source: I = formerly International Rectifier Diode unit
5. Bold text indicates new product
6. Halogen free



RECTIFIERS

Standard and Fast Recovery Rectifiers



Fast Avalanche Rated Sinterglass Diodes

Part Number	V_R V_{RRM} V_{RWM} (V)	I_{FAV} (A)	I_{FSM} at $t_p = 10$ ms (A)	V_F 25 °C (V)	At I_F (A)	I_R at T_j 25 °C (μ A)	I_R High Temp. (μ A)	At T_j (°C)	T_j, T_{STG} Min. (°C)	T_j, T_{STG} Max. (°C)	t_{rr} Max. (ns)	E_R (mJ)	At I_R (A)
BY203-12S	1200	0.25	20	2.4	0.2	2	—	—	- 55	175 ⁽¹⁾	300	10	0.4
BY203-16S	1600	0.25	20	2.4	0.2	2	—	—	- 55	175 ⁽¹⁾	300	10	0.4
BY203-20S	2000	0.25	20	2.4	0.2	2	—	—	- 55	175 ⁽¹⁾	300	10	0.4
BY268	1400	0.8	20	1.25	0.4	2	15	100	- 55	175	400	10	0.4
BY269	1600	0.8	20	1.25	0.4	2	15	100	- 55	175	400	10	0.4
BYT52A	50	1.4	50	1.3	1.0	5	150	150	- 55	175	200	10	0.4
BYT52B	100	1.4	50	1.3	1.0	5	150	150	- 55	175	200	10	0.4
BYT52D	200	1.4	50	1.3	1.0	5	150	150	- 55	175	200	10	0.4
BYT52G	400	1.4	50	1.3	1.0	5	150	150	- 55	175	200	10	0.4
BYT52J	600	1.4	50	1.3	1.0	5	150	150	- 55	175	200	10	0.4
BYT52K	800	1.4	50	1.3	1.0	5	150	150	- 55	175	200	10	0.4
BYT52M	1000	1.4	50	1.3	1.0	5	150	150	- 55	175	200	10	0.4
BYT54A	50	1.25	30	1.5	1.0	5	150	150	- 55	175	100	10	0.4
BYT54B	100	1.25	30	1.5	1.0	5	150	150	- 55	175	100	10	0.4
BYT54D	200	1.25	30	1.5	1.0	5	150	150	- 55	175	100	10	0.4
BYT54G	400	1.25	30	1.5	1.0	5	150	150	- 55	175	100	10	0.4
BYT54J	600	1.25	30	1.5	1.0	5	150	150	- 55	175	100	10	0.4
BYT54K	800	1.25	30	1.5	1.0	5	150	150	- 55	175	100	10	0.4
BYT54M	1000	1.25	30	1.5	1.0	5	150	150	- 55	175	100	10	0.4
BYV12	100	1.5	40	1.5	1.0	5	150	150	- 55	175	300	10	0.4
BYV13	400	1.5	40	1.5	1.0	5	150	150	- 55	175	300	10	0.4
BYV14	600	1.5	40	1.5	1.0	5	150	150	- 55	175	300	10	0.4
BYV15	800	1.5	40	1.5	1.0	5	150	150	- 55	175	300	10	0.4
BYV16	1000	1.5	40	1.5	1.0	5	150	150	- 55	175	300	10	0.4
BYV37	800	2.0	50	1.1	1.0	5	150	150	- 55	175	300	10	0.4
BYV38	1000	2.0	50	1.1	1.0	5	150	150	- 55	175	300	10	0.4
BYW32	200	2.0	50	1.1	1.0	5	150	150	- 55	175	200	10	0.4
BYW33	300	2.0	50	1.1	1.0	5	150	150	- 55	175	200	10	0.4
BYW34	400	2.0	50	1.1	1.0	5	150	150	- 55	175	200	10	0.4
BYW35	500	2.0	50	1.1	1.0	5	150	150	- 55	175	200	10	0.4
BYW36	600	2.0	50	1.1	1.0	5	150	150	- 55	175	200	10	0.4
1N5417	200	3	100	1.1	3	1	20	100	- 55	175	100	20	1
1N5418	400	3	100	1.1	3	1	20	100	- 55	175	100	20	1
BYW172D	200	3	100	1.1	3	1	20	100	- 55	175	100	20	1
BYW172F	300	3	100	1.1	3	1	20	100	- 55	175	100	20	1
BYW172G	400	3	100	1.1	3	1	20	100	- 55	175	100	20	1

Note:

 E_R = pulse energy in avalanche mode1. $T_j = 150$ °C



RECTIFIERS

Standard and Fast Recovery Rectifiers



Fast Avalanche Rated Sinterglass Diodes, continued

Part Number	V_R V_{RRM} V_{RWM} (V)	I_{FAV} (A)	I_{FSM} at $t_p = 10$ ms (A)	V_F 25 °C (V)	At I_F (A)	I_R at T_j 25 °C (μ A)	I_R High Temp. (μ A)	At T_j (°C)	T_j , T_{STG} Min. (°C)	T_j , T_{STG} Max. (°C)	t_{rr} Max. (ns)	E_R (mJ)	At I_R (A)
BYM36A	200	3	65	1.6	3	5	100	150	- 55	175	100	20	1
BYM36B	400	3	65	1.6	3	5	100	150	- 55	175	100	20	1
BYM36C	600	3	65	1.6	3	5	100	150	- 55	175	100	20	1
BYM36D	800	2.9	65	1.78	3	5	100	150	- 55	175	150	20	1
BYM36E	1000	2.9	65	1.78	3	5	100	150	- 55	175	150	20	1
BYT56A	50	3	80	1.4	3	5	150	150	- 55	175	100	10	0.4
BYT56B	100	3	80	1.4	3	5	150	150	- 55	175	100	10	0.4
BYT56D	200	3	80	1.4	3	5	150	150	- 55	175	100	10	0.4
BYT56G	400	3	80	1.4	3	5	150	150	- 55	175	100	10	0.4
BYT56J	600	3	80	1.4	3	5	150	150	- 55	175	100	10	0.4
BYT56K	800	3	80	1.4	3	5	150	150	- 55	175	100	10	0.4
BYT56M	1000	3	80	1.4	3	5	150	150	- 55	175	100	10	0.4
BYT77	800	3	100	1.2	3	5	150	150	- 55	175	250	10	0.4
BYT78	1000	3	100	1.2	3	5	150	150	- 55	175	250	10	0.4
BYW72	200	3	100	1.1	3	5	150	150	- 55	175	200	10	0.4
BYW73	300	3	100	1.1	3	5	150	150	- 55	175	200	10	0.4
BYW74	400	3	100	1.1	3	5	150	150	- 55	175	200	10	0.4
BYW75	500	3	100	1.1	3	5	150	150	- 55	175	200	10	0.4
BYW76	600	3	100	1.1	3	5	150	150	- 55	175	200	10	0.4

Note:

 E_R = pulse energy in avalanche mode1. $T_j = 150$ °C



RECTIFIERS

Bridge Rectifiers



Bridge Rectifiers are essential for any electronic equipment which requires full wave rectification of an AC power source. The bridge rectifier is comprised of four separate rectifier components configured into a “bridge” arrangement in a single package. Vishay manufactures a complete line of bridge rectifiers including fast recovery, surface-mount, and single in-line types.

$I_{F(AV)}$ (A)	Device ⁽¹⁾	Source ⁽²⁾	Package		$V_{(BR)}$ Range (V)	Max V_F at I_F	
			Family	Type		(V)	(A)
1.2	1KAB10E to 1KAB100E	I	Single Phase Rectifier Bridge	KAB	50 - 1000	1.1	1.2
1.9	2KBB05 to 2KBB100	I	Single In-Line Phase Rectifier Bridge	KBB	50 - 1000	1.1	1.9
2	2KBP005 to 2KBP10	I	Single In-Line Phase Rectifier Bridge	KBP	50 - 1000	1.0	1.0
3	KBPC1005 to KBPC110	I	Single Phase Rectifier Bridge	KBPC	50 - 1000	1.1	1.5
6	KBPC6005 to KBPC610	I	Single Phase Rectifier Bridge	KBPC	50 - 1000	1.2	3.0
8	KBPC8005 to KBPC810	I	Single Phase Rectifier Bridge	KBPC	50 - 1000	1.0	3.0
25	GBPC2502A to GBPC2512A	I	GBPC with fast-on lugs	GBPC25A	200 - 1200	1.1	25
25	GBPC2502W to GBPC2512W	I	GBPC with wire leads	GBPC25W	200 - 1200	1.1	25
25	P131 to P135	I	Single Phase Fully-Controlled Bridge	PACE-PAK (D-19)	400 - 1200	1.35	79
25	26MB05A to 26MB160A	I	Single Phase Rectifier Bridge	MB (D-34)	50 - 1600	1.25	40
25	P121 to P125	I	Single Phase Semi-Controlled Bridge Doubler	PACE-PAK (D-19)	400 - 1200	1.35	79
25	P101 to P105 ⁽⁴⁾⁽⁵⁾	I	Single Phase Semi-Controlled Bridge Common Cathode	PACE-PAK (D-19)	400 - 1200	1.35	79
25	26MT10 to 26MT160	I	Three Phase Bridge	MT (D-63)	100 - 1600	1.26	40
35	GBPC3502A to GBPC3512A	I	GBPC with Fast-On Lugs	GBPC35A	200 - 1200	1.1	35
35	GBPC3502W to GBPC3512W	I	GBPC with Wire Leads	GBPC35W	200 - 1200	1.1	35
35	36MB05A to 36MB160A	I	Single Phase Rectifier Bridge	MB (D-34)	50 - 1600	1.3	55
35	36MT10 to 36MT160	I	Three Phase Bridge	MT (D-63)	100 - 1600	1.19	40
40	P431 to P435	I	Single Phase Fully-Controlled Bridge	PACE-PAK (D-19)	400 - 1200	1.4	126
40	P421 to P425	I	Single Phase Semi-Controlled Bridge Doubler	PACE-PAK (D-19)	400 - 1200	1.4	126
40	P401 to P405 ⁽⁴⁾⁽⁵⁾	I	Single Phase Semi-Controlled Bridge Common Cathode	PACE-PAK (D-19)	400 - 1200	1.4	126
40	40MT160KPBF	I	Three Phase Bridge	MTK (Screwable)	1600	2.0	100
45	40MT160BPBPF and 40MT160PAPBF	I	Three Phase Bridge	MTP..PA and MTP..PB	1600	1.45	40
50	54MT80KPBF to 54MT160KPBF	I	Three Phase AC Switch	MTK (Screwable)	800 - 1600	2.68	150
55	53MT80KPBF to 53MT160KPBF	I	Full-Controlled Three Phase Bridge	MTK (Screwable)	800 - 1600	2.68	150
55	51MT80KPBF to 51MT160KPBF	I	Negative Half-Controlled Three Phase Bridge	MTK (Screwable)	800 - 1600	2.68	150

Note:

1. Bold text indicates new product

2. Source: I = formerly International Rectifier Diode unit

3. V_F limits are per diode

4. Voltage suppressor available (identified by suffix “K”)

5. With both voltage suppression and freewheeling diode available (identified by suffix “KW”)



RECTIFIERS

Bridge Rectifiers



Bridge Rectifiers, continued

$I_{F(AV)}$ (A)	Device ⁽¹⁾	Source ⁽²⁾	Package		$V_{(BR)}$ Range (V)	Max V_F at I_F	
			Family	Type		(V)	(A)
55	52MT80KPBF to 52MT160KPBF	I	Positive Half-Controlled Three Phase Bridge	MTK (Screwable)	800 - 1600	2.68	150
60	60MT80KPBF to 60MT160KPBF	I	Three Phase Bridge	MTK (Screwable)	800 - 1600	1.75	100
70	70MT80KPBF to 70MT160KPBF	I	Three Phase Bridge	MTK (Screwable)	800 - 1600	1.6	100
75	70MT160PBPBF and 70MT160PAPBF	I	Three Phase Bridge	MTP..PA and MTP..PB	1600	1.45	70
75	100MT160PBPBF and 100MT160PAPBF	I	Three Phase Bridge	MTP..PA and MTP..PB	1600	1.51	100
90	93MT80KPBF to 93MT160KPBF	I	Full-Controlled Three Phase Bridge	MTK (Screwable)	800 - 1600	1.65	150
90	113MT80KPBF to 113MT160KPBF	I	Full-Controlled Three Phase Bridge	MTK (Screwable)	800 - 1600	1.57	150
90	91MT80KPBF to 91MT160KPBF	I	Negative Half-Controlled Three Phase Bridge	MTK (Screwable)	800 - 1600	1.65	150
90	111MT80KPBF to 111MT160KPBF	I	Negative Half-Controlled Three Phase Bridge	MTK (Screwable)	800 - 1600	1.57	150
90	92MT80KPBF to 92MT160KPBF	I	Positive Half-Controlled Three Phase Bridge	MTK (Screwable)	800 - 1600	1.65	150
90	112MT80KPBF to 112MT160KPBF	I	Positive Half-Controlled Three Phase Bridge	MTK (Screwable)	800 - 1600	1.57	150
90	94MT80KPBF to 94MT160KPBF	I	Three Phase AC Switch	MTK (Screwable)	800 - 1600	1.55	150
90	90MT80KPBF to 90MT160KPBF	I	Three Phase Bridge	MTK (Screwable)	800 - 1600	1.6	150
100	104MT80KPBF to 104MT160KPBF	I	Three Phase AC Switch	MTK (Screwable)	800 - 1600	1.53	150
110	110MT80KPBF to 110MT160KPBF	I	Three Phase Bridge	MTK (Screwable)	800 - 1600	1.4	150
130	130MT80KPBF to 130MT160KPBF	I	Three Phase Bridge	MTK (Screwable)	800 - 1600	1.63	200
160	160MT80KPBF to 160MT160KPBF	I	Three Phase Bridge	MTK (Screwable)	800 - 1600	1.49	200
200	200MT40KPBF	I	Three Phase Bridge	MTK (Screwable)	400	1.4	200

Note:

1. Bold text indicates new product
2. Source: I = formerly International Rectifier Diode unit
3. V_F limits are per diode
4. Voltage suppressor available (identified by suffix "K")

5. With both voltage suppression and freewheeling diode available (identified by suffix "KW")



RECTIFIERS

Bridge Rectifiers



Bridge Rectifiers, continued

$I_{F(AV)}$ (A)	Device ⁽¹⁾	Package		$V_{(BR)}$ Range (V)	Max V_F at I_F ⁽⁵⁾	
		Family	Type		(V)	(A)
0.5	MB2M, MB4M, and MB6M	Mini-Bridge ⁽²⁾	MBM	200 - 600	1.0	0.4
0.5	B2M, B4M, and B6M	Mini-Bridge ⁽²⁾	MBM	200 - 600	1.0	0.5
0.5	MB2S, MB4S, and MB6S	Mini-Bridge (SMD) ⁽²⁾	MBS (TO-269AA)	200 - 600	1.0	0.4
0.5	B2S, B4S and B6S	Mini-Bridge (SMD) ⁽²⁾	MBS (TO-269AA)	200 - 600	1.0	0.5
0.5	RMB2S and RMB4S	Recovery Mini-Bridge (SMD) ⁽²⁾	MBS (TO-269AA)	200 - 400	1.25	0.4
0.9	BxxC800DM	Dual In-Line ⁽²⁾	DFM	65 - 600	1.0	0.9
0.9	B40C800G to B380C800G	WOG ⁽²⁾	WG	65 - 600	1.0	0.9
1.0	B40C1000G to B380C1000G	WOG ⁽²⁾	WG	65 - 600	1.0	1.0
1.0	DF005M to DF10M	Dual In-Line ⁽²⁾	DFM	50 - 1000	1.1	1.0
1.0	DF005MA to DF10MA	Dual In-Line ⁽²⁾	DFM	50 - 1000	1.1	1.0
1.0	DF005S to DF10S	Dual In-Line (SMD) ⁽²⁾	DFS	50 - 1000	1.1	1.0
1.0	DF005SA to DF10SA	Dual In-Line (SMD) ⁽²⁾	DFS	50 - 1000	1.1	1.0
1.0	EDF1AM to EDF1DM	Ultrafast Dual In-Line ⁽²⁾⁽³⁾	DFM	50 - 200	1.05	1.0
1.0	EDF1AS to EDF1DS	Ultrafast Dual In-Line (SMD) ⁽²⁾⁽³⁾	DFS	50 - 200	1.05	1.0
1.5	3N246 to 3N252	Single In-Line ⁽²⁾	KBPM	50 - 1000	1.0 / 1.3	1.0 / 1.57
1.5	B40C1500G to B380C1500G	WOG ⁽²⁾	WG	65 - 600	1.0	1.5
1.5	DF15005S to DF1510S	Dual In-Line (SMD) ⁽²⁾	DFS	50 - 1000	1.1	1.5
1.5	DFL15005S to DFL1510S	Low-Profile DIL (SMD) ⁽²⁾	L-DFS	50 - 1400	1.1	1.5
1.5	G2SB20, G2SB60, and G2SB80	Single In-Line ⁽²⁾⁽⁴⁾	GBL	200 - 800	1.0	0.75
1.5	G2SBA20, G2SBA60, and G2SBA80	Single In-Line ⁽²⁾⁽⁴⁾	GBL	200 - 800	1.0	0.75
1.5	KBP005M to KBP10M	Single In-Line ⁽²⁾	KBPM	50 - 1000	1.0 / 1.3	1.0 / 1.57
1.5	W005G to W10G	WOG ⁽²⁾	WG	50 - 1000	1.0	1.0
2.0	2KBP005M to 2KBP10M	Single In-Line ⁽²⁾	KBPM	50 - 1000	1.1	3.14
2.0	2W005G to 2W10G	WOG ⁽²⁾	WG	50 - 1000	1.1	2.0
2.0	3N253 to 3N259	Single In-Line ⁽²⁾	KBPM	50 - 1000	1.1	3.14
3.0	GBPC1005 to GBPC110	GBPC with Wire Leads ⁽²⁾	GBPC1	50 - 1000	1.0	1.5
3.0	3KBP005M to 3KBP08M	Single In-Line⁽²⁾	KBPM	50 - 800	1.05	3.0
4.0	G3SBA20S, G3SBA60, and G3SBA80	Single In-Line with Mounting Hole ⁽²⁾⁽⁴⁾	GBU	200 - 800	1.0	2.0
4.0	GBL005 to GBL10	Single In-Line ⁽²⁾	GBL	50 - 1000	1.0	4.0
4.0	GBLA005 to GBLA10	Single In-Line ⁽²⁾	GBL	50 - 1000	1.0	4.0
4.0	GBU4A to GBU4M	Single In-Line with Mounting Hole ⁽²⁾	GBU	50 - 1000	1.0	4.0
4.0	KBL005 to KBL10	Single In-Line	KBL	50 - 1000	1.1	4.0
4.0	KBU4A to KBU4M	Single In-Line with Mounting Hole	KBU	50 - 1000	1.0	4.0
6.0	GBPC6005 to GBPC610	GBPC with Wire Leads ⁽²⁾	GBPC6	50 - 1000	1.0	3.0
6.0	GBU6A to GBU6M	Single In-Line with Mounting Hole ⁽²⁾	GBU	50 - 1000	1.0	6.0
6.0	G5SBA20, G5SBA60, and G5SBA80	Single In-Line with Mounting Hole ⁽²⁾⁽⁴⁾	GBU	200 - 800	1.05	3.0

Note:

1. Bold text indicates new product
2. Glass passivated die
3. t_{rr} = 50ns max. for EDF1 types

4. Japanese electrical specifications

5. V_F limits are per diode



RECTIFIERS

Bridge Rectifiers



Bridge Rectifiers, continued

$I_{F(AV)}$ (A)	Device ⁽¹⁾	Package		$V_{(BR)}$ Range (V)	Max V_F at I_F ⁽⁵⁾	
		Family	Type		(V)	(A)
6.0	GSIB620 to GSIB680	Single In-Line with Mounting Hole ⁽²⁾	GSIB-5S	200 - 800	0.95	3.0
6.0	GSIB620N, GSIB640N, GSIB660N, GSIB680N	Single In-Line with Mounting Hole ⁽²⁾	GSIB-5S	200 - 800	0.95	3.0
6.0	GSIB6A20 to GSIB6A80	Single In-Line with Mounting Hole ⁽²⁾	GSIB-5S	200 - 800	1.0	3.0
6.0	GSIB6A20N, GSIB6A40N, GSIB6A60N, GSIB6A80N	Single In-Line with Mounting Hole ⁽²⁾	GSIB-5S	200 - 800	1.0	3.0
6.0	KBU6A to KBU6M	Single In-Line with Mounting Hole	KBU	50 - 1000	1.0	6.0
6.0	VSIB620 to VSIB680	Single In-Line with Mounting Hole ⁽²⁾	GSIB-5S	200 - 800	0.95	3.0
6.0	VSIB6A20 to VSIB6A80	Single In-Line with Mounting Hole ⁽²⁾	GSIB-5S	200 - 800	1.0	3.0
8.0	GBU8A to GBU8M	Single In-Line with Mounting Hole ⁽²⁾	GBU	50 - 1000	1.0	8.0
8.0	KBU8A to KBU8M	Single In-Line with Mounting Hole	KBU	50 - 1000	1.0	8.0
10	BU1006 to BU1010	Single In-Line with Mounting Hole⁽²⁾	BU	600 - 1000	1.05	5.0
10	BU1006A to BU1010A	Single In-Line with Mounting Hole⁽²⁾	BU	600 - 1000	1.1	5.0
10	VSIB10A20 to VSIB10A80	Single In-Line with Mounting Hole ⁽²⁾	GSIB-5S	200 - 800	1.0	5.0
12	BU1206 to BU1210	Single In-Line with Mounting Hole⁽²⁾	BU	600 - 1000	1.05	6.0
12	GBPC12005 to GBPC1210	GBPC with Fast-On Lugs ⁽²⁾	GBPC12-35	50 - 1000	1.1	6.0
12	GBPC12005W to GBPC1210W	GBPC with Wire Leads ⁽²⁾	GBPC12-35W	50 - 1000	1.1	6.0
15	BU1506 to BU1510	Single In-Line with Mounting Hole⁽²⁾	BU	600 - 1000	1.05	7.5
15	GBPC15005 to GBPC1510	GBPC with Fast-On Lugs ⁽²⁾	GBPC12-35	50 - 1000	1.1	7.5
15	GBPC15005W to GBPC1510W	GBPC with Wire Leads ⁽²⁾	GBPC12-35W	50 - 1000	1.1	7.5
15	GSIB1520 to GSIB1580	Single In-Line with Mounting Hole ⁽²⁾⁽⁴⁾	GSIB-5S	200 - 800	0.95	7.5
15	GSIB1520N, GSIB1540N, GSIB1560N, GSIB1580N	Single In-Line with Mounting Hole ⁽²⁾⁽⁴⁾	GSIB-5S	200 - 800	0.95	7.5
15	GSIB15A20 to GSIB15A80	Single In-Line with Mounting Hole ⁽²⁾⁽⁴⁾	GSIB-5S	200 - 800	1.05	7.5
15	GSIB15A20N, GSIB15A40N, GSIB15A60N, GSIB15A80N	Single In-Line with Mounting Hole ⁽²⁾⁽⁴⁾	GSIB-5S	200 - 800	1.05	7.5
15	VSIB1520 to VSIB1580	Single In-Line with Mounting Hole ⁽²⁾⁽⁴⁾	GSIB-5S	200 - 800	0.95	7.5
15	VSIB15A20 to VSIB15A80	Single In-Line with Mounting Hole ⁽²⁾⁽⁴⁾	GSIB-5S	200 - 800	1.0	7.5
20	BU2006 to BU2010	Single In-Line with Mounting Hole⁽²⁾	BU	600 - 1000	1.05	10.0
20	GSIB2020 to GSIB2080	Single In-Line with Mounting Hole ⁽²⁾⁽⁴⁾	GSIB-5S	200 - 800	1.1	10.0
20	GSIB2020N, GSIB2040N, GSIB2060N, GSIB2080N	Single In-Line with Mounting Hole ⁽²⁾⁽⁴⁾	GSIB-5S	200 - 800	1.1	10
20	VSIB2020 to VSIB2080	Single In-Line with Mounting Hole ⁽²⁾⁽⁴⁾	GSIB-5S	200 - 800	1.0	10.0
25	BU2506 to BU2510	Single In-Line with Mounting Hole⁽²⁾	BU	600 - 1000	1.05	12.5
25	GBPC25005 to GBPC2510	GBPC with Fast-On Lugs ⁽²⁾	GBPC12-35	50 - 1000	1.1	12.5
25	GBPC25005W to GBPC2510W	GBPC with Wire Leads ⁽²⁾	GBPC12-35W	50 - 1000	1.1	12.5
25	GSIB2520 to GSIB2580	Single In-Line with Mounting Hole ⁽²⁾⁽⁴⁾	GSIB-5S	200 - 800	1.05	12.5

Note:

1. Bold text indicates new product
2. Glass passivated die
3. t_{rr} = 50ns max. for EDF1 types

4. Japanese electrical specifications

5. V_F limits are per diode



RECTIFIERS

Bridge Rectifiers



Bridge Rectifiers, continued

$I_{F(AV)}$ (A)	Device ⁽¹⁾	Package		$V_{(BR)}$ Range (V)	Max V_F at I_F ⁽⁵⁾	
		Family	Type		(V)	(A)
25	GSIB2520N, GSIB2540N, GSIB2560N, GSIB2580N	Single In-Line with Mounting Hole ⁽²⁾⁽⁴⁾	GSIB-5S	200 - 800	1.05	12.5
25	VSIB2520 to VSIB2580	Single In-Line with Mounting Hole ⁽²⁾⁽⁴⁾	GSIB-5S	200 - 800	1.0	12.5
30	PB3006 to PB3010	Single In-Line with Mounting Hole⁽²⁾	PB	600 - 1000	1.10	15.0
35	GBPC35005 to GBPC3510	GBPC with Fast-On Lugs ⁽²⁾	GBPC12-35	50 - 1000	1.1	17.5
35	GBPC35005W to GBPC3510W	GBPC with Wire Leads ⁽²⁾	GBPC12-35W	50 - 1000	1.1	17.5
35	PB3506 to PB3510	Single In-Line with Mounting Hole⁽²⁾	PB	600 - 1000	1.10	17.5
40	PB4006 to PB4010	Single In-Line with Mounting Hole⁽²⁾	PB	600 - 1000	1.10	20.0
45	PB5006 to PB5010	Single In-Line with Mounting Hole⁽²⁾	PB	600 - 1000	1.10	22.5

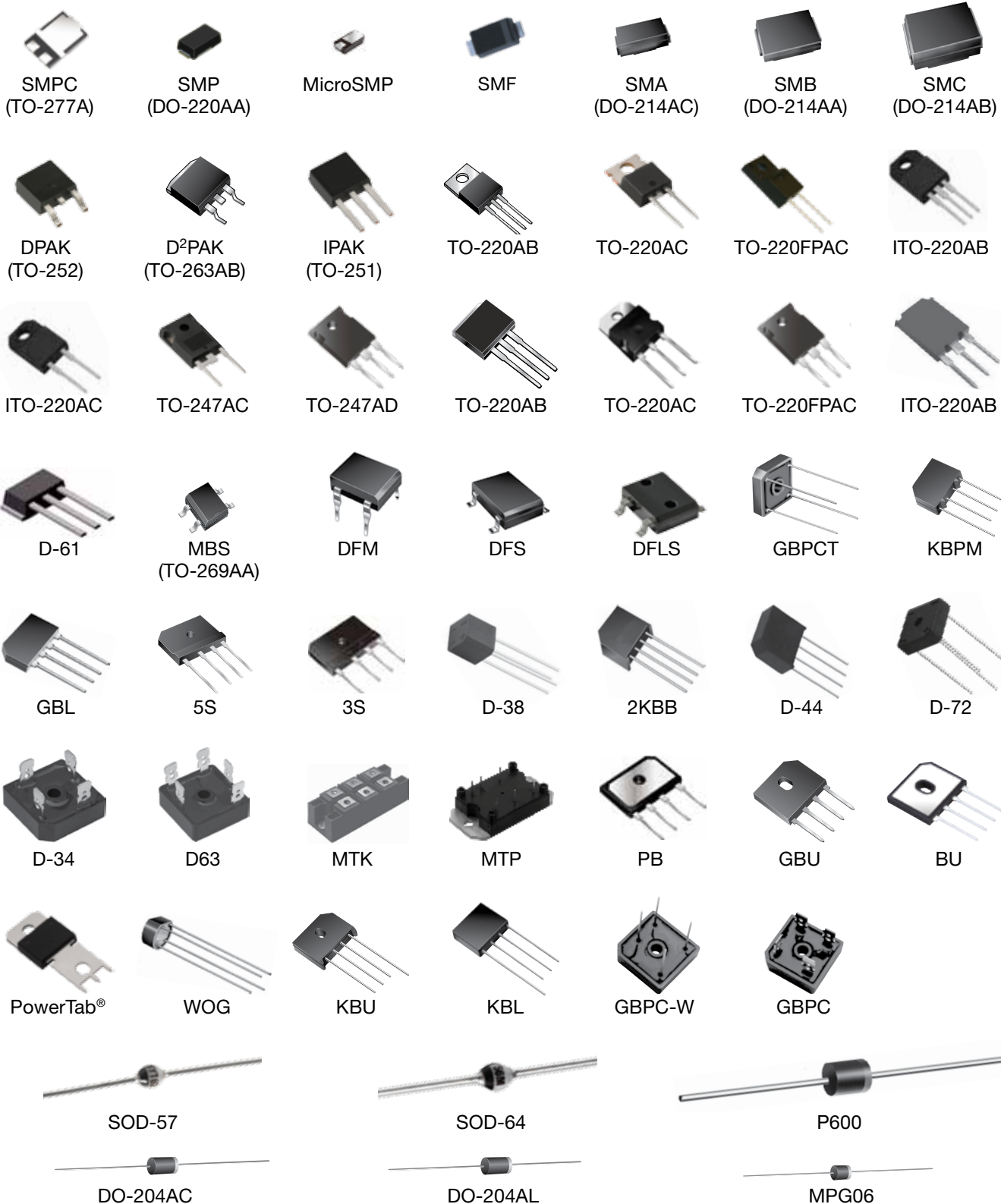
Note:

1. Bold text indicates new product
2. Glass passivated die
3. t_{rr} = 50ns max. for EDF1 types

4. Japanese electrical specifications

5. V_F limits are per diode

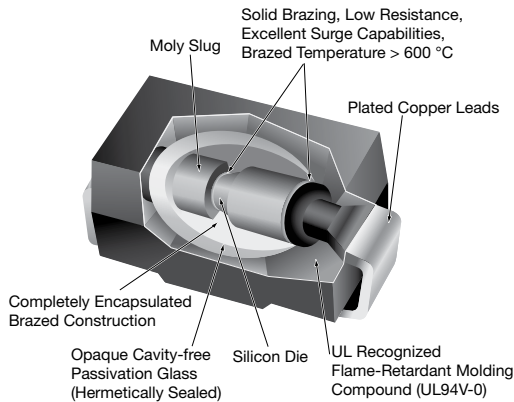
Rectifier Packages



Sample Package Construction

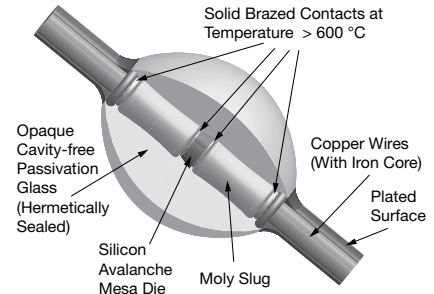
SUPERECTIFIER®

The SUPERECTIFIER is exactly that: a super rectifier. This highly-reliable and cost-effective rectifier is the result of a combination of patented technologies. No other 0.25 A to 3.0 A rectifiers of any kind — plastic, glass, or metal — can match the SUPERECTIFIER combination of features that result from Vishay's unique glass-plastic construction. SUPERECTIFIER products are offered in standard, fast, and ultrafast types for both axial and surface mounting.



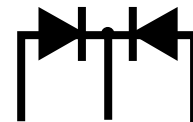
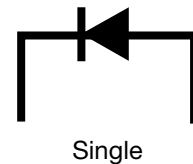
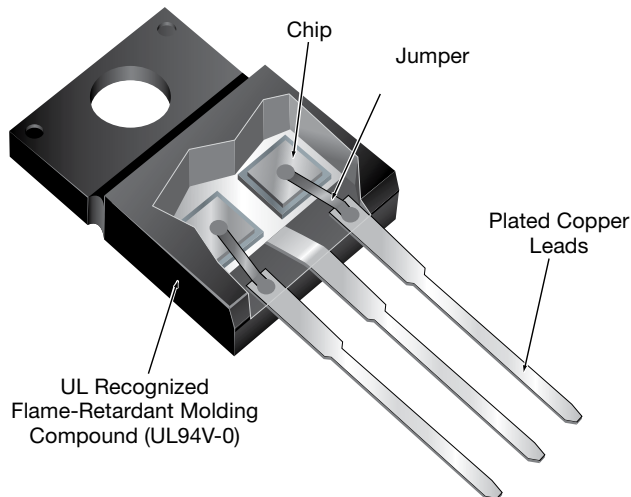
SINTERGLASS RECTIFIER

The glass passivated rectifier is a hermetically sealed, diffused junction rectifier with unsurpassed operating and surge capabilities at high temperatures. An extremely pure, specially developed glass applied in direct contact with the silicon junction, creates an ideal cavity-free passivating medium. Glass rectifiers are offered in standard, fast, and ultrafast types.



ITO-220AB

Vishay offers the TO-220 power package with either the heat sink exposed or with an isolated body, as shown below.





WORLDWIDE SALES CONTACTS

THE AMERICAS

UNITED STATES

VISHAY AMERICAS
ONE GREENWICH PLACE
SHELTON, CT 06484
UNITED STATES
PH: +1-402-563-6866
FAX: +1-402-563-6296

ASIA

SINGAPORE

VISHAY INTERTECHNOLOGY ASIA PTE LTD.
37A TAMPINES STREET 92 #07-00
SINGAPORE 528886
PH: +65-6788-6668
FAX: +65-6788-0988

P.R. CHINA

VISHAY CHINA CO., LTD.
15D, SUN TONG INFOPORT PLAZA
55 HUAI HAI WEST ROAD
SHANGHAI 200030
P.R. CHINA
PH: +86-21-5258 5000
FAX: +86-21-5258 7979

JAPAN

VISHAY JAPAN CO., LTD.
SHIBUYA PRESTIGE BLDG. 4F
3-12-22, SHIBUYA
SHIBUYA-KU
TOKYO 150-0002
JAPAN
PH: +81-3-5466-7150
FAX: +81-3-5466-7160

EUROPE

GERMANY

VISHAY ELECTRONIC GMBH
DR.-FELIX-ZANDMAN-PLATZ 1
95100 SELB
GERMANY
PH: +49-9287-71-0
FAX: +49-9287-70435

FRANCE

VISHAY S.A.
199, BD DE LA MADELEINE
06003 NICE, CEDEX 1
FRANCE
PH: +33-4-9337-2727
FAX: +33-4-9337-2726

UNITED KINGDOM

VISHAY LTD.
SUITE 6C, TOWER HOUSE
ST. CATHERINE'S COURT
SUNDERLAND ENTERPRISE PARK
SUNDERLAND SR5 3XJ
UNITED KINGDOM
PH: +44-191-516-8584
FAX: +44-191-549-9556

Looking for pricing, stock, or lifecycle information?

Click below to explore more details on WIN SOURCE:

 [View 70CRU04PBF](#) on WIN SOURCE

 [Vishay](#) Information

Optimize Your Supply Chain with WIN SOURCE Solutions

-  Global Sourcing Solution
-  Obsolete Management
-  Cost Control Management
-  Shortage Management
-  Alternative Solution
-  Excess Inventory Management