



**THE DATASHEET OF
CMR3U-10M TR13 PBFREE**



CMR3U-01M CMR3U-06M
 CMR3U-02M CMR3U-10M
 CMR3U-04M

**SURFACE MOUNT SILICON
 ULTRA FAST RECOVERY RECTIFIERS
 3.0 AMP, 100 THRU 1000 VOLT**



www.centrasemi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMR3U-01M series 3.0 Amp surface mount silicon ultra fast recovery rectifier is a highly reliable component designed for use in all types of commercial, industrial, entertainment, computer, and automotive applications.

MARKING CODE: SEE MARKING CODE TABLE ON FOLLOWING PAGE



SMB CASE

FEATURES:

- High reliability
- Glass passivated chip
- Special selections available
- "C" bend construction provides strain relief when mounted on PC board

MAXIMUM RATINGS: ($T_A=25^\circ\text{C}$ unless otherwise noted)

	SYMBOL	CMR3U-01M	CMR3U-02M	CMR3U-04M	CMR3U-06M	CMR3U-10M	UNITS
Peak Repetitive Reverse Voltage	V_{RRM}	100	200	400	600	1000	V
DC Blocking Voltage	V_R	100	200	400	600	1000	V
RMS Reverse Voltage	$V_{R(RMS)}$	70	140	280	420	700	V
Average Forward Current ($T_A=75^\circ\text{C}$)	I_O			3.0			A
Peak Forward Surge Current, $t_p=8.3\text{ms}$	I_{FSM}			100			A
Operating and Storage Junction Temperature	T_J, T_{stg}			-65 to +175			$^\circ\text{C}$
Thermal Resistance	θ_{JL}			30			$^\circ\text{C/W}$

ELECTRICAL CHARACTERISTICS: ($T_A=25^\circ\text{C}$ unless otherwise noted)

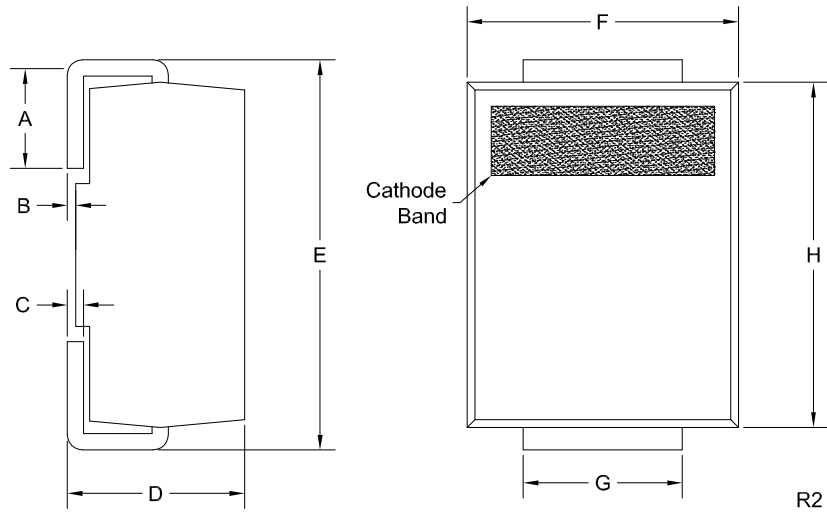
SYMBOL	TEST CONDITIONS	MAX	UNITS
I_R	V_R =Rated V_{RRM}	5.0	μA
I_R	V_R =Rated V_{RRM} , $T_A=100^\circ\text{C}$	500	μA
V_F	$I_F=3.0\text{A}$ (CMR3U-01M, -02M)	1.00	V
V_F	$I_F=3.0\text{A}$ (CMR3U-04M)	1.25	V
V_F	$I_F=3.0\text{A}$ (CMR3U-06M)	1.40	V
V_F	$I_F=3.0\text{A}$ (CMR3U-10M)	2.00	V
t_{rr}	$I_F=0.5\text{A}$, $I_R=1.0\text{A}$, $I_{rr}=0.25\text{A}$ (CMR3U-01M, -02M, -04M)	50	ns
t_{rr}	$I_F=0.5\text{A}$, $I_R=1.0\text{A}$, $I_{rr}=0.25\text{A}$ (CMR3U-06M, -10M)	100	ns

CMR3U-01M CMR3U-06M
 CMR3U-02M CMR3U-10M
 CMR3U-04M



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SMB CASE - MECHANICAL OUTLINE



DEVICE	MARKING CODE
CMR3U-01M	CU301M
CMR3U-02M	CU302M
CMR3U-04M	CU304M
CMR3U-06M	CU306M
CMR3U-10M	CU310M

SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.030	0.060	0.76	1.52
B	0.000	0.008	0.00	0.20
C	0.006	0.012	0.15	0.30
D	0.086	0.096	2.18	2.44
E	0.200	0.220	5.08	5.59
F	0.130	0.150	3.30	3.81
G	0.077	0.083	1.96	2.11
H	0.160	0.191	4.06	4.85

SMB (REV: R2)

R4 (4-September 2018)

OUTSTANDING SUPPORT AND SUPERIOR SERVICES



PRODUCT SUPPORT

Central's operations team provides the highest level of support to insure product is delivered on-time.

- Supply management (Customer portals)
- Inventory bonding
- Consolidated shipping options
- Custom bar coding for shipments
- Custom product packing

DESIGNER SUPPORT/SERVICES

Central's applications engineering team is ready to discuss your design challenges. Just ask.

- Free quick ship samples (2nd day air)
- Online technical data and parametric search
- SPICE models
- Custom electrical curves
- Environmental regulation compliance
- Customer specific screening
- Up-screening capabilities
- Special wafer diffusions
- PbSn plating options
- Package details
- Application notes
- Application and design sample kits
- Custom product and package development

REQUESTING PRODUCT PLATING

1. If requesting Tin/Lead plated devices, add the suffix "TIN/LEAD" to the part number when ordering (example: 2N2222A TIN/LEAD).
2. If requesting Lead (Pb) Free plated devices, add the suffix "PBFREE" to the part number when ordering (example: 2N2222A PBFREE).

CONTACT US

Corporate Headquarters & Customer Support Team

Central Semiconductor Corp.
145 Adams Avenue
Hauppauge, NY 11788 USA
Main Tel: (631) 435-1110
Main Fax: (631) 435-1824
Support Team Fax: (631) 435-3388
www.centrasemi.com

Worldwide Field Representatives:
www.centrasemi.com/wwreps

Worldwide Distributors:
www.centrasemi.com/wwdistributors

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Optimize Your Supply Chain with WIN SOURCE Solutions

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