



THE DATASHEET OF S10B-TP



NOT RECOMMENDED FOR NEW DESIGNS
USE S10AL-TP~S10ML-TP Series



Micro Commercial Components



Micro Commercial Components
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**S10A
 THRU
 S10M**

**10 Amp
 Silicon Rectifier
 50 to 1000 Volts**

Features

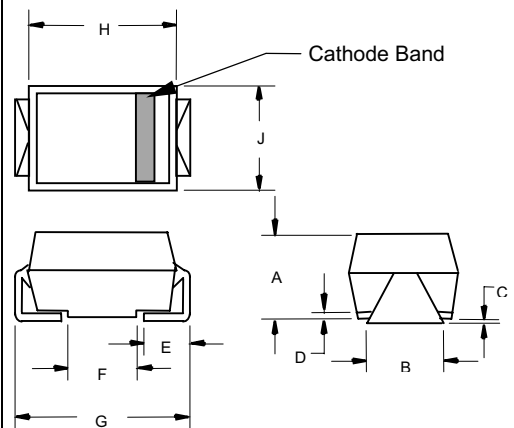
- Lead Free Finish/Rohs Compliant (Note1) ("P" Suffix designates Compliant. See ordering information)
- Low Thermal Resistance
- High Temp Soldering: 260°C for 10 Seconds At Terminals
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Maximum Thermal Resistance: 10°C/W Junction To Case
- Halogen free available upon request by adding suffix "-HF"

Maximum Ratings

- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
S10A	S10A	50V	35V	50V
S10B	S10B	100V	70V	100V
S10D	S10D	200V	140V	200V
S10G	S10G	400V	280V	400V
S10J	S10J	600V	420V	600V
S10K	S10K	800V	560V	800V
S10M	S10M	1000V	700V	1000V

**DO-214AB
 (HSMC) (Round Lead)**



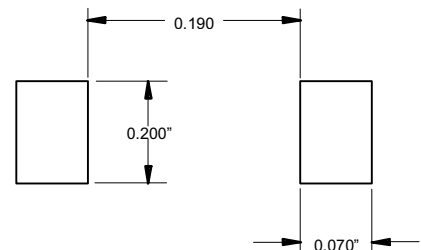
Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	10.0A	$T_C = 75^\circ\text{C}$
Peak Forward Surge Current	I_{FSM}	200A	8.3ms, half sine
Maximum Instantaneous Forward Voltage	V_F	1.20V	$I_{FM} = 10.0\text{A};$ $T_J = 25^\circ\text{C}^*$
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	10 μA	$T_J = 25^\circ\text{C}$

*Pulse test: Pulse width 200 μsec , Duty cycle 2%
 Note: 1. High Temperature Solder Exemptions Applied, see EU Directive Annex 7.

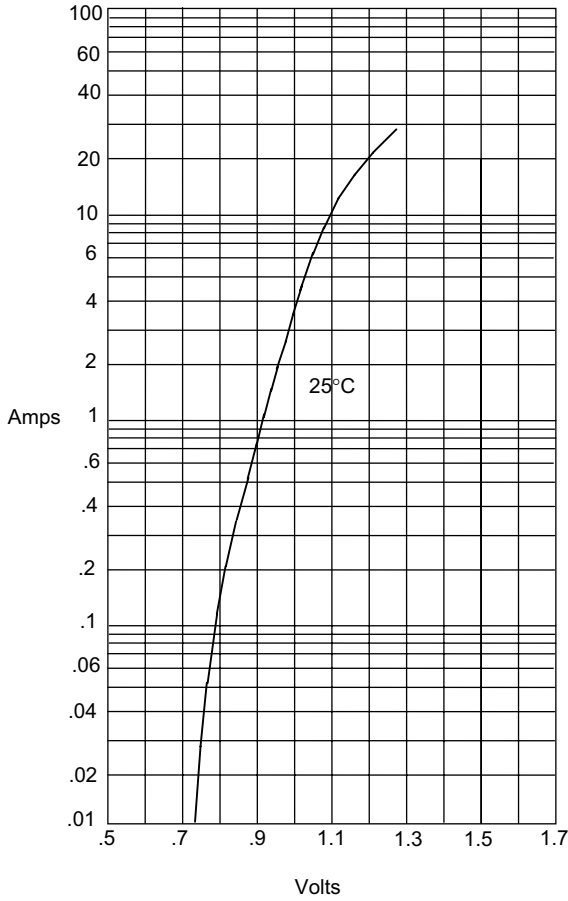
DIM	DIMENSIONS				NOTE
	INCHES		MM		
A	.200	.214	5.08	5.43	
B	.177	.203	4.70	5.30	
C	.002	.005	.05	.13	
D	—	.02	—	.51	
E	.047	.056	1.20	1.42	
F	.168	.179	4.27	4.55	
G	.309	.322	7.85	8.18	
H	.239	.243	6.08	6.18	
J	.234	.240	5.95	6.10	

SUGGESTED SOLDER PAD LAYOUT



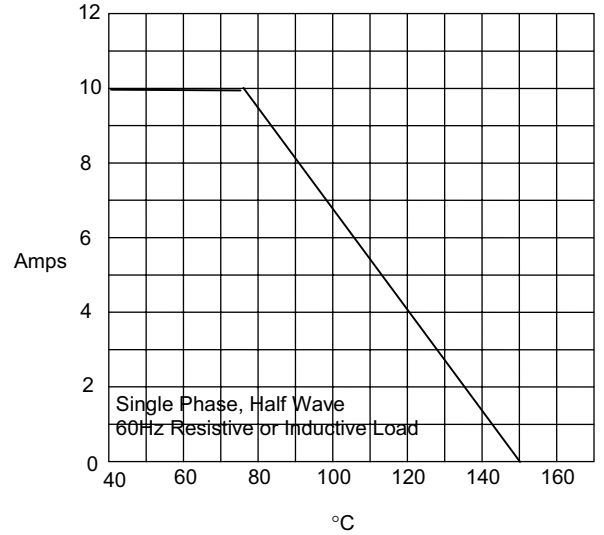
S10A thru S10M

Figure 1
Typical Forward Characteristics



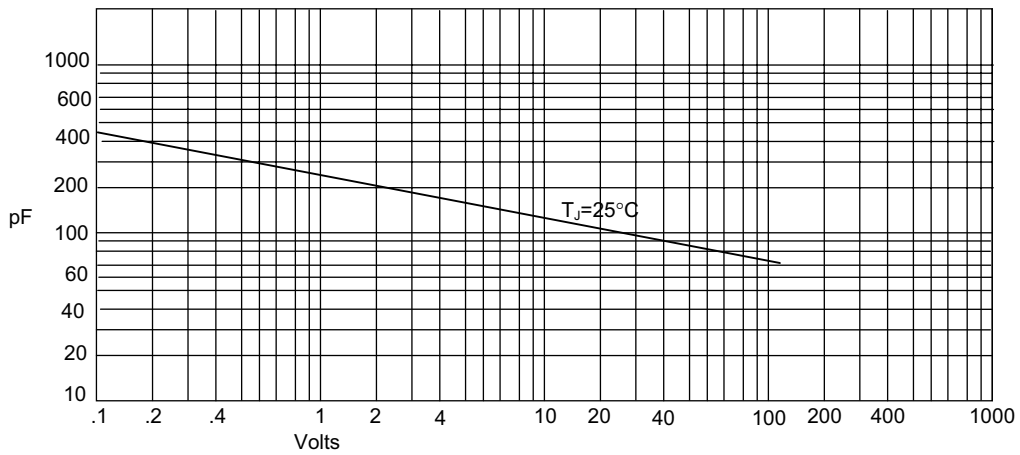
Instantaneous Forward Current - Amperes *versus*
Instantaneous Forward Voltage - Volts

Figure 2
Forward Derating Curve



Average Forward Rectified Current - Amperes *versus*
Case Temperature - °C

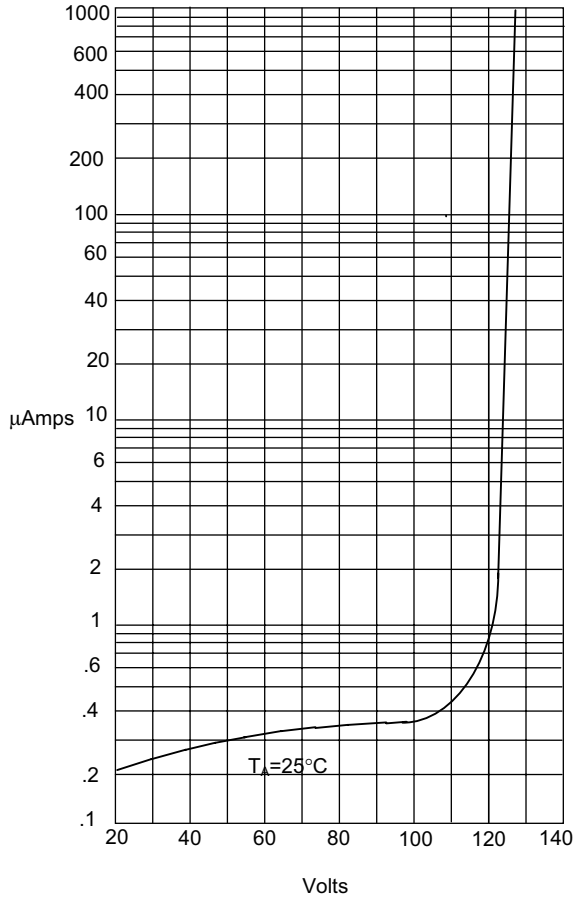
Figure 3
Junction Capacitance



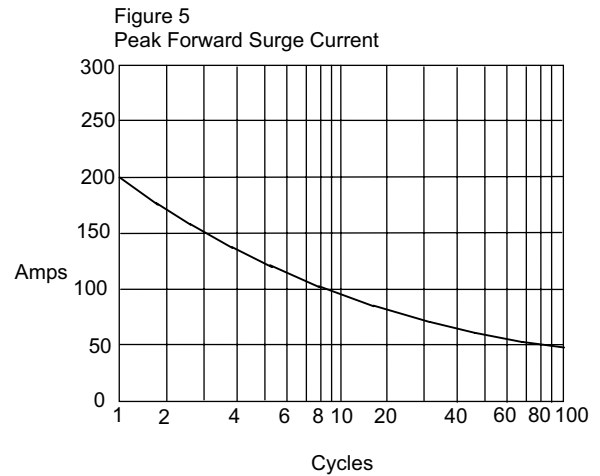
Junction Capacitance - pF *versus*
Reverse Voltage - Volts

S10A thru S10M

Figure 4
Typical Reverse Characteristics



Instantaneous Reverse Leakage Current - MicroAmperes versus
Percent Of Rated Peak Reverse Voltage - Volts



Peak Forward Surge Current - Amperes versus
Number Of Cycles At 60Hz - Cycles



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Ordering Information :

Device	Packing
Part Number-TP	Tape&Reel: 1.5Kpcs/Reel

Note : Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

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