



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
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0 and MSL rating 1

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

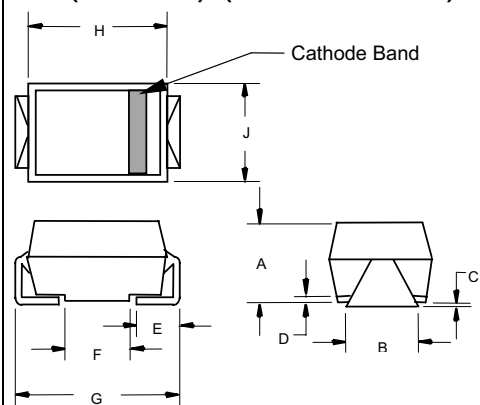
Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	10.0A	$T_J = 75^\circ\text{C}$
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%

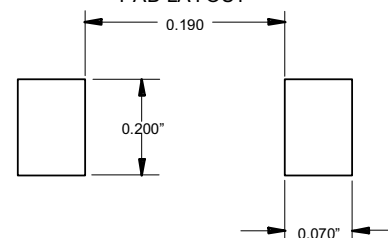
Note: 1. High Temperature Solder Exemptions Applied, see EU Directive Annex 7.

DO-214AB (HSMC) (Round Lead)



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

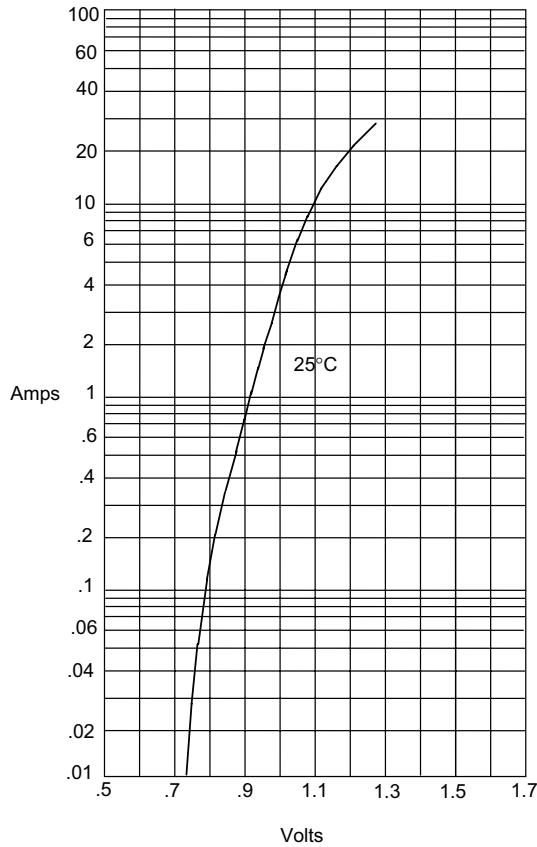


S10A thru S10M



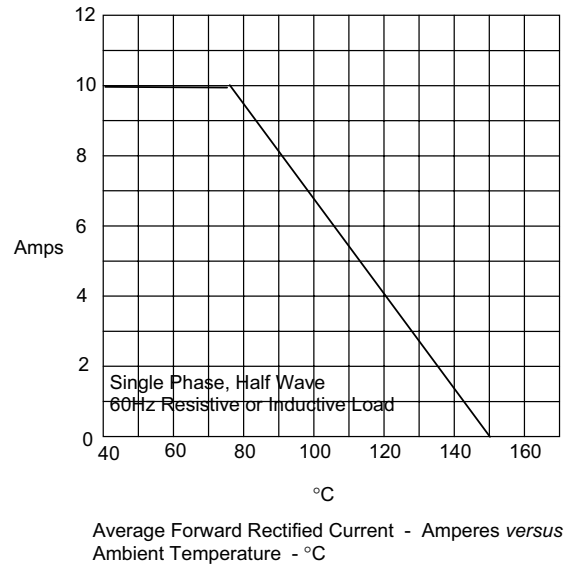
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Figure 1
Typical Forward Characteristics



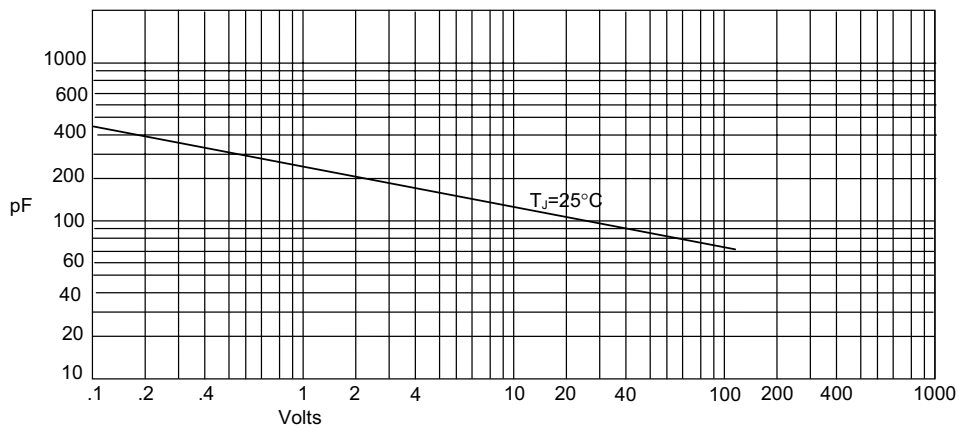
Instantaneous Forward Current - Amperes versus
Instantaneous Forward Voltage - Volts

Figure 2
Forward Derating Curve



Average Forward Rectified Current - Amperes versus
Ambient Temperature - °C

Figure 3
Junction Capacitance



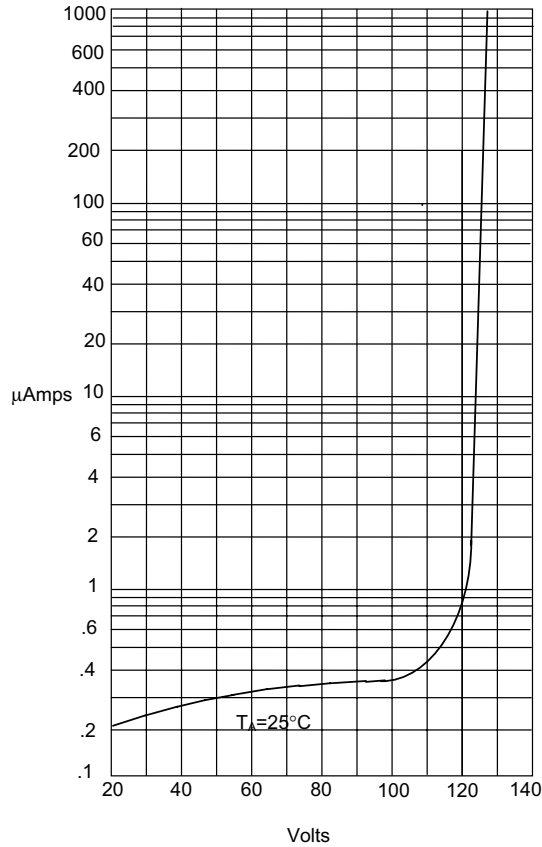
Junction Capacitance - pF versus
Reverse Voltage - Volts

S10A thru S10M



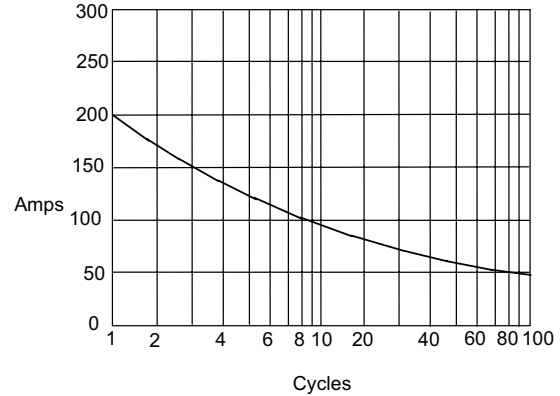
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Figure 4
Typical Reverse Characteristics



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

Figure 5
Peak Forward Surge Current



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

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