

Micro Commercial Components



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S10A THRU S10M

50 to 1000 Volts

Features 10 Amp Lead Free Finish/Rohs Compliant (Note1) ("P"Suffix designates Silicon Rectifier 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

Maximum Ratings

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

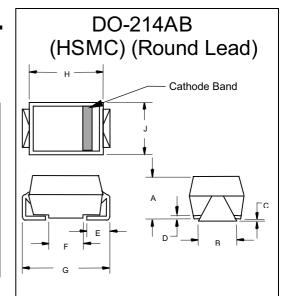
MCC		Maximum	Maximum	Maximum
Part	Device	Recurrent	RMS	DC
Number	Marking	Peak Reverse	Voltage	Blocking
		Voltage	_	Voltage
S10A	S10A	50V	35V	50V
S10B	S10B	100V	70V	100V
S10D	S10D	200V	140V	200V
S10G	S10G	400V	280V	400V
S10J	S10J	600V	420V	600V
S10K	S10K	800V	560V	800V
S10M	S10M	1000V	700V	1000V

Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	I _{F(AV)}	10.0A	T _c = 75°C
Peak Forward Surge Current	I _{FSM}	200A	8.3ms, half sine
Maximum Instantaneous Forward Voltage	V _F	1.20V	I _{FM} = 10.0A; T _J = 25°C*
Maximum DC Reverse Current At Rated DC Blocking Voltage	I _R	10μΑ	T _J = 25°C

*Pulse test: Pulse width 200 µsec, Duty cycle 2%

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



	DIMENSIONS						
	INCHES		MM				
DIM	MIN	MAX	MIN	MAX	NOTE		
Α	.200	.214	5.08	5.43			
В	.177	.203	4.70	5.30			
С	.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			
Н	.239	.243	6.08	6.18			
J	.234	.240	5.95	6.10			
SUGGESTED SOLDER							
	PAD LAYOUT						
	0.190						
	5.7.65						
0.200"							
_							

S10A thru S10M



Typical Forward Characteristics



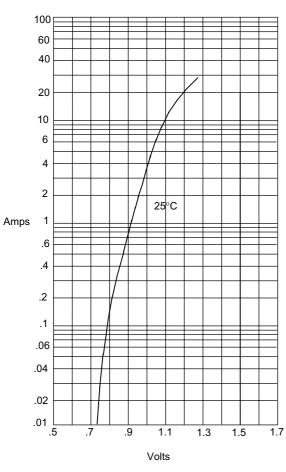
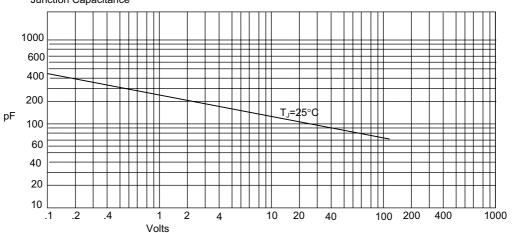


Figure 2 Forward Derating Curve 12 10 8 6 Amps Single Phase, Half Wave 60Hz Resistive or Inductive Loa 0 80 100 140 160 40

> Average Forward Rectified Current - Amperes versus Case Temperature $\mbox{-}\,^{\circ}\text{C}$

Instantaneous Forward Current - Amperes versus Instantaneous Forward Voltage - Volts

Figure 3 Junction Capacitance



Junction Capacitance - pF versus Reverse Voltage - Volts

S10A thru S10M



Figure 4
Typical Reverse Characteristics

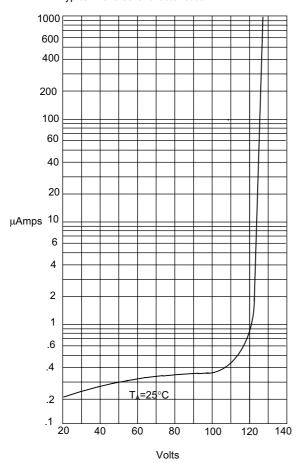


Figure 5
Peak Forward Surge Current

300
250
200
150
Amps
100
50
0
1 2 4 6 8 10 20 40 60 80 100

Cycles

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

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



Ordering Information:

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

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Micro Commercial Components (MCC): S10A-TP S1G-TP