

S10AL THRU S10ML

Features

- Lead Free Finish/Rohs Compliant (Note1) ("P" Suffix designates Compliant. See ordering information)
- Glass Passivated Chip
- 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; 18°C/W Junction To Lead
- 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
- Typical Thermal Resistance: 17°C/W Junction to Case
47°C/W Junction to Ambient
13°C/W Junction to Lead

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
S10AL	S10AL	50V	35V	50V
S10BL	S10BL	100V	70V	100V
S10DL	S10DL	200V	140V	200V
S10GL	S10GL	400V	280V	400V
S10JL	S10JL	600V	420V	600V
S10KL	S10KL	800V	560V	800V
S10ML	S10ML	1000V	700V	1000V

Electrical Characteristics @ 25°C Unless Otherwise Specified

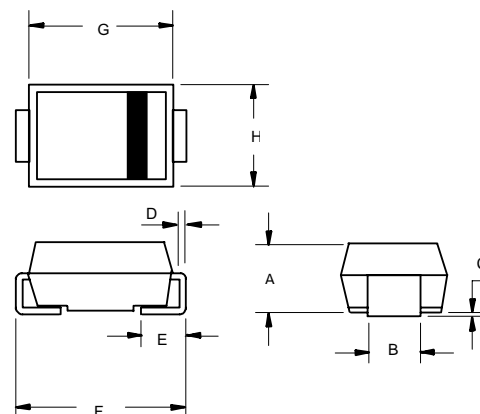
Average Forward Current	$I_{F(AV)}$	10.0A	$T_C = 75^\circ\text{C}$
Peak Forward Surge Current	I_{FSM}	200A	8.3ms, half sine
I^2t Rating for fusing	I^2t	166A ² S	($t < 8.3\text{ms}$)
Maximum Instantaneous Forward Voltage	V_F	1.20V	$I_{FM} = 10.0\text{A}; T_J = 25^\circ\text{C}^*$
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	10 μA	$T_J = 25^\circ\text{C}$

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

Note1: High Temperature Solder Exemptions Applied, see EU Directive Annex 7.

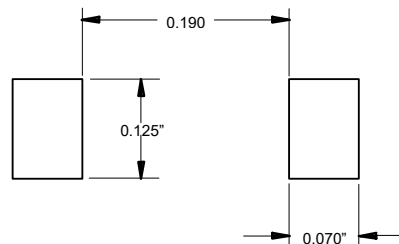
10 Amp Surface Mount Glass Passivated Rectifier 50 - 1000 Volts

SMC (DO-214AB)



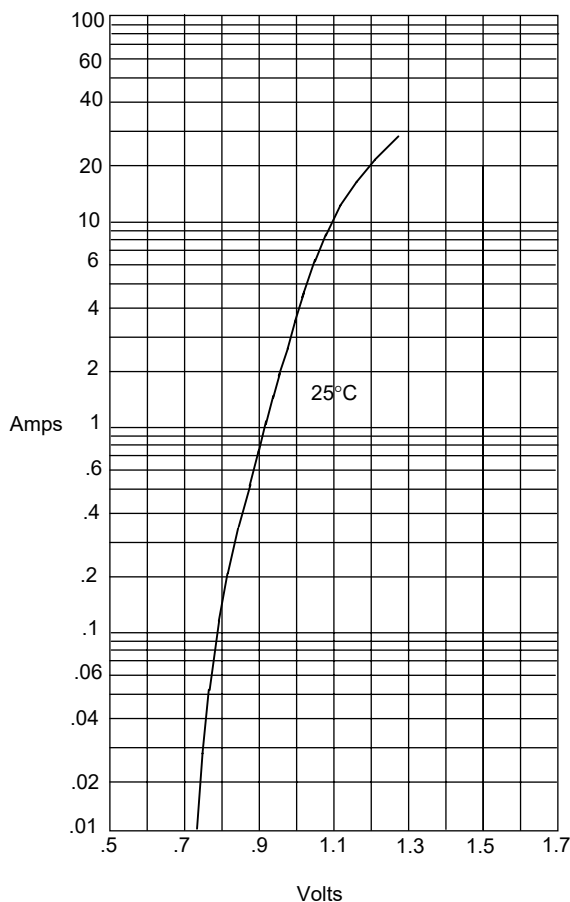
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.079	.103	2.00	2.62	
B	.108	.128	2.75	3.25	
C	.002	.008	0.061	0.203	
D	.006	.012	0.152	0.305	
E	.030	.060	0.76	1.52	
F	.305	.320	7.75	8.13	
G	.260	.280	6.60	7.11	
H	.220	.245	5.59	6.22	

SUGGESTED SOLDER PAD LAYOUT



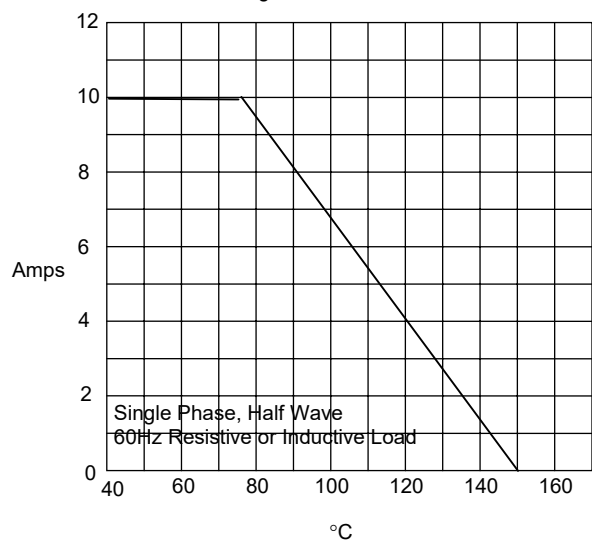
S10AL thru S10ML

Figure 1
Typical Forward Characteristics



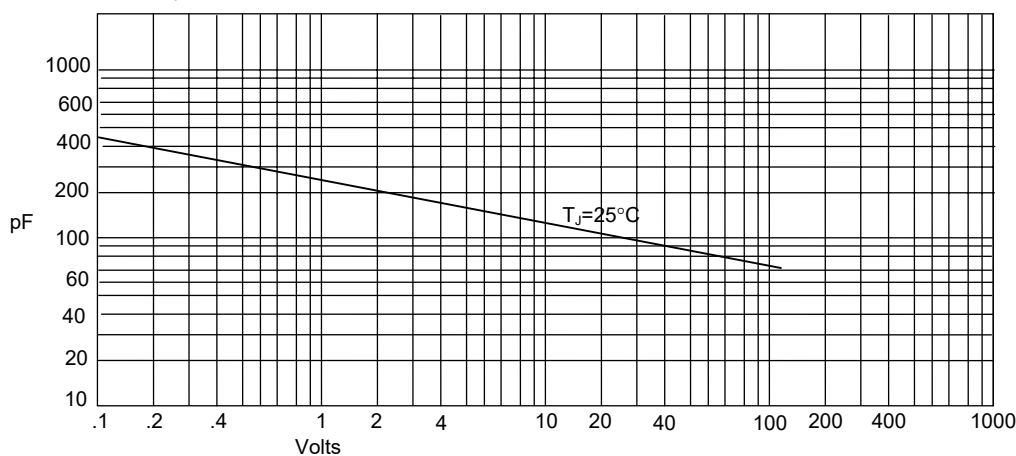
Instantaneous Forward Current - Amperes *versus*
Instantaneous Forward Voltage - Volts

Figure 2
Forward Derating Curve



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

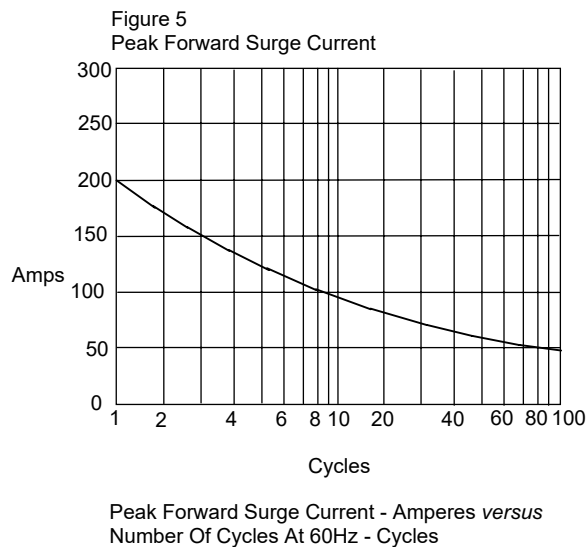
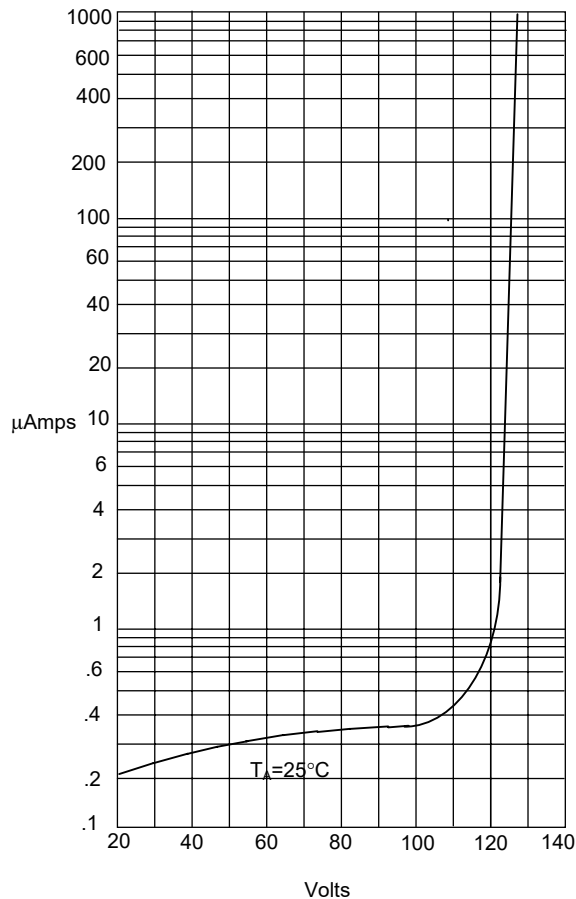
Figure 3
Junction Capacitance



Junction Capacitance - pF *versus*
Reverse Voltage - Volts

S10AL thru S10ML

Figure 4
Typical Reverse Characteristics



Ordering Information :

Device	Packing
Part Number-TP	Tape&Reel: 3Kpcs/Reel

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

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