

Features

- Halogen Free. "Green" Device (Note 1)
- Glass Passivated Chip Junction
- . High Surge Current Capability
- · Low Leakage
- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 1
- Lead Free Finish/RoHS Compliant (Note 2)("P" Suffix Designates RoHS Compliant. See Ordering Information)

Maximum Ratings @ 25°C (Unless Otherwise Specified)

Damanastan	0	Value						11!4	
Parameter	Symbol	S10AL	S10BL	S10DL	S10GL	S10JL	S10KL	S10ML	Unit
Peak Repetitive Reverse Voltage	V_{RRM}								
Working Peak Reverse Voltage	V_{RWM}	50	100	200	400	600	800	1000	V
DC Blocking Voltage	V_R								
RMS Reverse Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Average Rectified Forward Current @ T _L =35°C	I _{F(AV)}	10				Α			
Non-Repetitive Peak Surge Current @ 8.3ms Half Sine Wave	-	200				Α			
Non-Repetitive Peak Surge Current @ 1ms Square Wave	I _{FSM}	400						Α	
I²t Rating for Fusing @1ms≤t≤8.3ms	I ² t	166			A ² s				

Marking Code

Part Number	Marking Code
S10AL	S10AL
S10BL	S10BL
S10DL	S10DL
S10GL	S10GL
S10JL	S10JL
S10KL	S10KL
S10ML	S10ML

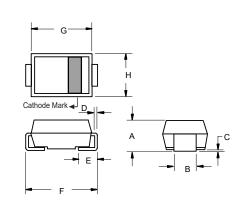
Marking Diagram	Internal Structure		
1 MCC XXXX = Marking Code	1 ∘———• 2		

Note: 1. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.

2. High Temperature Solder Exemption Applied, see EU Directive Annex 7a.

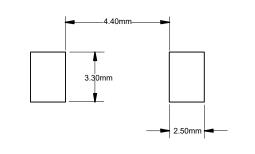
10 Amp Glass Passivated Rectifier 50 to 1000 Volts

SMC (DO-214AB)



DIMENSIONS						
DIM INCHES		HES	M	M	NOTE	
DIIVI	MIN		MIN MAX		INOTE	
Α	0.079	0.103	2.00	2.62		
В	0.108	0.128	2.75	3.25		
С	0.002	0.008	0.051	0.203		
D	0.006	0.012	0.152	0.305		
E	0.030	0.060	0.76	1.52		
F	0.305	0.320	7.75	8.13		
G	0.260	0.280	6.60	7.11		
Н	0.220	0.245	5.59	6.22		

Suggested Solder Pad Layout





Thermal characteristics

Symbol	Parameter	Conditions	Min	Тур	Max	Unit
T _J	Operating Junction Temperature Range		-55		150	°C
T _{stg}	Storage Temperature Range		-55		150	°C
Rth _(J-L)	Thermal Resistance from Junction to Lead	Note 1		12		°C/W
Rth _(J-A)	Thermal Resistance from Junction to Ambient	Note 1		45		°C/W

Electrical Characteristics @ 25°C Unless Otherwise Specified

Parameter	Symbol	Test Conditions	Min	Тур	Max	Unit
Forward Voltage	V _F	I _F =10A;T _J =25°C		0.96	1.10	V
Reverse Current	I _R	at Rated V _R ;T _J =25°C at Rated V _R ;T _J =100°C			5 100	μА
Junction Capacitance	CJ	V _R =4V;f=1MHz;T _J =25°C		55		pF

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Curve Characteristics

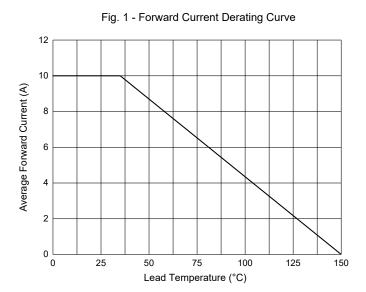


Fig. 3 - Typical Forward Characteristics

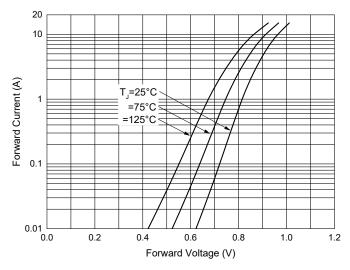


Fig. 5 - Typical Capacitance Characteristics

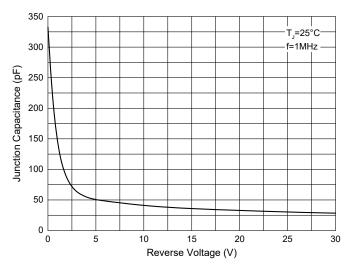


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge
Current

240

(V)

160

80

80

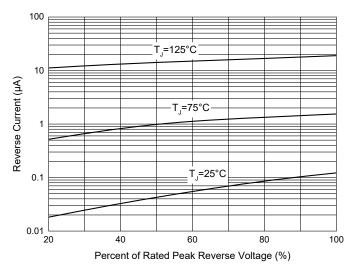
80

8.3 ms Single Half Sine-Wave

1 10 100

Fig. 4 - Typical Reverse Leakage Characteristics

Number of Cycles at 60 Hz





Ordering Information

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

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