

Features

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

1 Amp Super Fast Recovery Rectifier 800 Volts

Maximum Ratings

- Operating Junction Temperature Range: -55°C to +175°C
- Storage Temperature Range: -55°C to +175°C
- Maximum Thermal Resistance: 20°C/W Junction to Lead

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	iviaximum	Maximum DC Blocking Voltage
HS1K	HS1K	800V	560V	800V

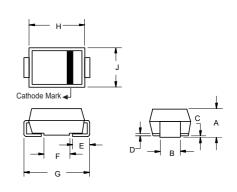
Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	I _{F(AV)}	1.0A	T _L =110°C	
Peak Forward Surge Current	I _{FSM}	30A	8.3ms,Half Sine	
Maximum Instantaneous Forward Voltage	V _F	2.2V	I _F =1.0A; T _A =25°C	
Maximum DC Reverse Current At Rated DC Blocking Voltage	I _R	5.0μA 50μA	T _A =25°C; T _A =125°C	
Maximum Reverse Recovery Time	t _{rr}	35ns	I _F =0.5A; I _R =1.0A; Irr=0.25A	
Typical Junction Capacitance	С	10pF	Measured at 1.0MHz V _R =4.0V	

Note:

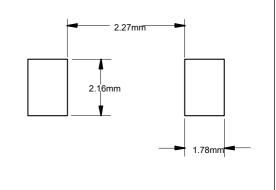
- 1. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.
- 2. High Temperature Solder Exemption Applied, See EU Directive Annex Notes 7a.

SMA (DO-214AC)



DIMENSIONS							
DIM	INCHES		MM		NOTE		
DIIVI	MIN	MAX	MIN	MAX	NOTE		
Α	0.075	0.096	1.90	2.44			
В	0.050	0.064	1.27	1.63			
С	0.002	0.008	0.051	0.203			
D		0.020		0.51			
E	0.030	0.060	0.76	1.52			
F	0.065	0.091	1.65	2.32			
G	0.189	0.220	4.80	5.59			
Н	0.157	0.187	4.00	4.75			
J	0.090	0.115	2.25	2.92			

SUGGESTED SOLDER PAD LAYOUT





Curve Characteristics

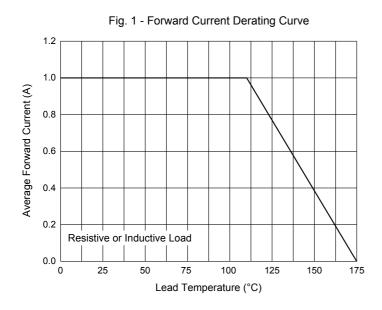


Fig. 3 - Typical Instantaneous Forward Characteristics

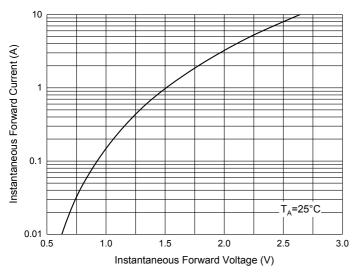


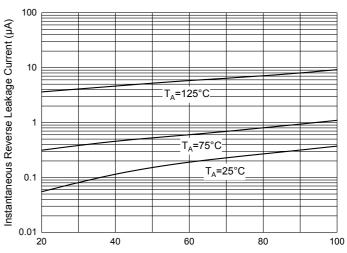
Fig. 2 - Maximum Non-Repetitive Peak Forward Surge

Current

35
30
20
20
15
8.3 ms Single Half Sine-Wave
0
1 10 100

Number of Cycles at 60 Hz

Fig. 4 - Typical Reverse Leakage Characteristics





Ordering Information

Device	Packing	
(Part Number)-TP	Tape&Reel: 5Kpcs/Reel	

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