

Features

- · Glass Passivated Junction
- Extremely Low Thermal Resistance
- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 1
- Halogen Free. "Green" Device (Note 1)
- Lead Free Finish/RoHS Compliant (Note2) ("P"Suffix Designates Compliant. See Ordering Information)

1 Amp Glass Passivated Rectifier 50 - 1000 Volts

Maximum Ratings

• Operating Junction Temperature Range: -55°C to +150°C

• Storage Temperature Range: -55°C to +150°C

• Maximum Thermal Resistance: 15°C/W Junction to Lead

• Maximum Thermal Resistance: 85°C/W Junction to Ambient

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
GS1A-L	GS1A	50V	35V	50V
GS1B-L	GS1B	100V	70V	100V
GS1D-L	GS1D	200V	140V	200V
GS1G-L	GS1G	400V	280V	400V
GS1J-L	GS1J	600V	420V	600V
GS1K-L	GS1K	800V	560V	800V
GS1M-L	GS1M	1000V	700V	1000V

Electrical Characteristics @ 25°C Unless Otherwise Specified

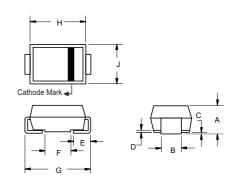
			<u>-</u>	
Average Forward Current	I _{F(AV)}	1.0A	T _L = 110°C	
Peak Forward Surge Current	 FSM	30A	8.3ms, Half Sine	
Maximum Instantaneous Forward Voltage	V _F	1.0V	I _{FM} = 1.0A;T _J = 25°C *	
Maximum DC Reverse Current At Rated DC Blocking Voltage	I _R	5μΑ 50μΑ	T _J = 25°C T _J = 125°C	
Typical Junction Capacitance	C _J	8pF	Measured at 1.0MHz, V _R =4.0V	
Typical Reverse Recovery Time	t _{rr}	2.0µs	I _F =0.5A, I _R =1.0A,Irr=0.25A	
Rating For Fusing	l ² t	3.735A ² s		
Avalanche Energy	EAS	20mJ	LH:40mH	

*Pulse Test: Pulse Width 300 µsec, Duty Cycle 2%

Note:

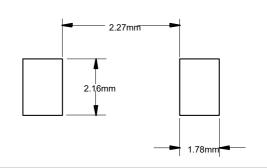
- 1. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.
- 2. High Temperature Solder Exemption Applied, See EU Directive Annex 7a.

SMA (DO-214AC)



DIMENSIONS						
DIM	INCHES		MM		NOTE	
	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. 1 - Typical Instantaneous Forward Characteristics

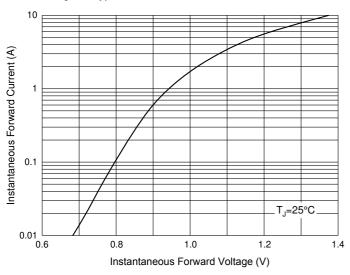


Fig. 3 - Forward Current Derating Curve

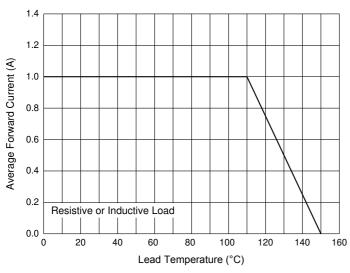


Fig. 2 - Typical Reverse Leakage Characteristics

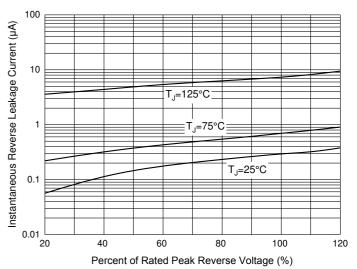
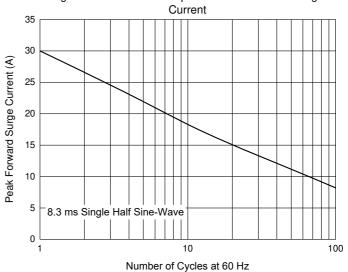


Fig. 4 - Maximum Non-Repetitive Peak Forward Surge





Ordering Information

Device	Packing
GS1A-LTP~GS1M-LTP	Tape&Reel: 7.5Kpcs/Reel

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