

## Features

- Halogen Free. "Green" Device (Note 1)
- AEC-Q101 Qualified
- Lead Free Finish/RoHS Compliant (Note2) ("P" Suffix Designates Compliant. See Ordering Information)
- For Surface Mount Applications
- Extremely Low Thermal Resistance
- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 1

## Maximum Ratings

- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Typical Thermal Resistance: 20°C/W Junction to Lead
- Typical Thermal Resistance: 53°C/W Junction to Ambient

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
GS2AHE3-L	GS2A	50V	35V	50V
GS2BHE3-L	GS2B	100V	70V	100V
GS2DHE3-L	GS2D	200V	140V	200V
GS2GHE3-L	GS2G	400V	280V	400V
GS2JHE3-L	GS2J	600V	420V	600V
GS2KHE3-L	GS2K	800V	560V	800V
GS2MHE3-L	GS2M	1000V	700V	1000V

## Electrical Characteristics @ 25°C Unless Otherwise Specified

Parameter	Symbol	Value	Conditions
Average Forward Current	$I_{F(AV)}$	2.0A	$T_L=110^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	50A	8.3ms, Half Sine
Maximum Instantaneous Forward Voltage	$V_F$	1.1V	$I_{FM}=2.0A$ ; $T_J=25^\circ\text{C}^*$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	5.0 $\mu\text{A}$ 0.1 $\mu\text{A}$ (Typ.) 50 $\mu\text{A}$ 4.5 $\mu\text{A}$ (Typ.) 125 $\mu\text{A}$	$T_J=25^\circ\text{C}$ ; $T_J=100^\circ\text{C}$ $T_J=125^\circ\text{C}$
Typical Junction Capacitance	$C_J$	20pF	Measured at 1.0MHz $V_R=4.0V$
Maximum Reverse Recovery Time	$t_{rr}$	2.1 $\mu\text{s}$ (Typ) 4 $\mu\text{s}$ (Max)	$I_F=0.5A$ ; $I_R=1.0A$ ; $I_{rr}=0.25A$
Avalanche Energy	EAS	20mJ	LH:40mH, $T_J=150^\circ\text{C}$

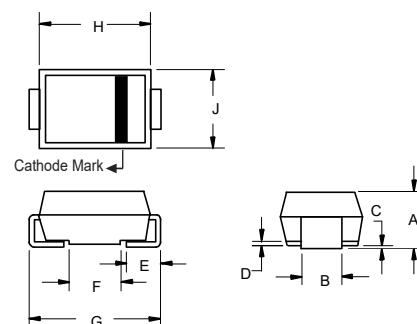
\*Pulse Test: Pulse Width 300  $\mu\text{sec}$ , Duty Cycle 2%

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.

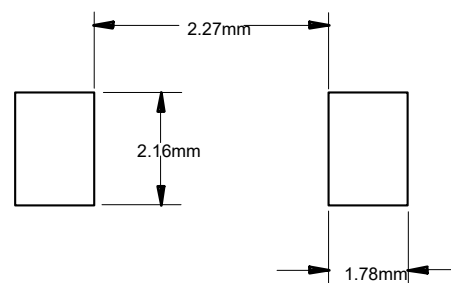
# 2.0 Amp Glass Passivated Rectifier 50 to 1000 Volts

## SMA (DO-214AC)



DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	0.075	0.096	1.90	2.44	
B	0.050	0.064	1.27	1.63	
C	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	
H	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 - Forward Current Derating Curve

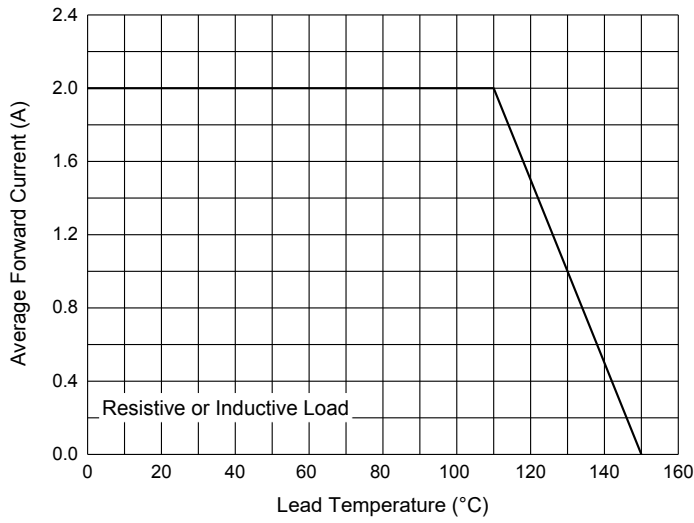


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

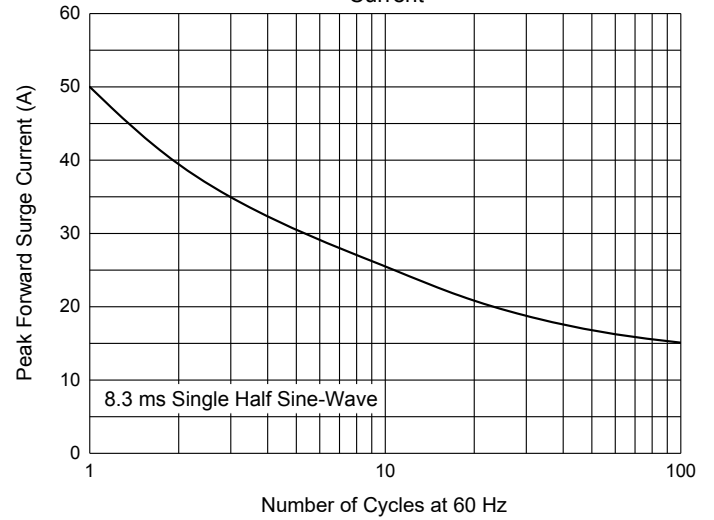


Fig. 3 - Typical Instantaneous Forward Characteristics

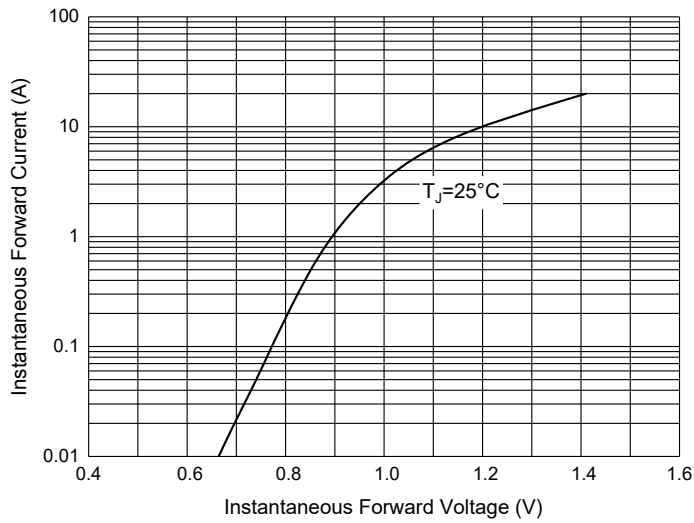
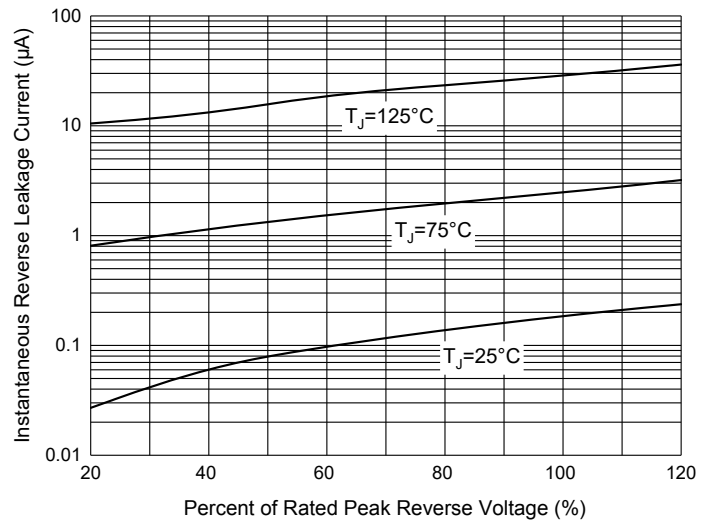


Fig. 4 - Typical Reverse Leakage Characteristics



## Ordering Information

Device	Packing
GS2AHE3-LTP~GS2MHE3-LTP	Tape&Reel: 7.5Kpcs/Reel

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