

# GS2A-L THRU GS2M-L

## Features

- Lead Free Finish/RoHS Compliant(Note1) ("P" Suffix designates Compliant. See ordering information)
- For Surface Mount Applications
- Extremely Low Thermal Resistance
- Easy Pick And Place
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- 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 : 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
GS2A-L	GS2A	50V	35V	50V
GS2B-L	GS2B	100V	70V	100V
GS2D-L	GS2D	200V	140V	200V
GS2G-L	GS2G	400V	280V	400V
GS2J-L	GS2J	600V	420V	600V
GS2K-L	GS2K	800V	560V	800V
GS2M-L	GS2M	1000V	700V	1000V

## Electrical Characteristics @ 25°C Unless Otherwise Specified

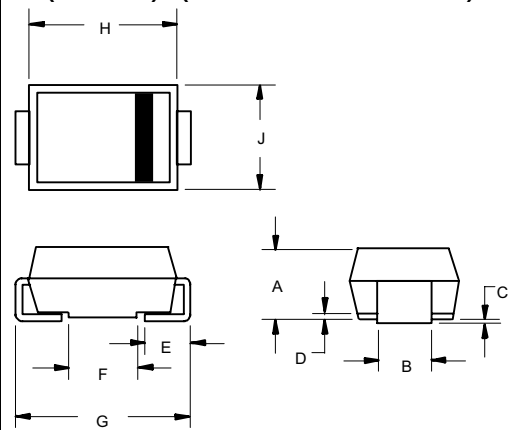
Average Forward current	$I_{F(AV)}$	2.0A	$T_L = 110^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	50A	8.3ms, half sine
Maximum Instantaneous Forward Voltage	$V_F$	1.1V	$I_{FM} = 2.0\text{A}; T_J = 25^\circ\text{C}^*$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	5 $\mu\text{A}$ 50 $\mu\text{A}$ 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, $V_R = 4.0\text{V}$
Maximum Reverse Recovery Time	$T_{rr}$	2.1 $\mu\text{s}$ (Typ.) 4 $\mu\text{s}$ (Max)	$I_F = 0.5\text{A}, I_R = 1.0\text{A}, I_{rr} = 0.25\text{A}$
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. High Temperature Solder Exemptions Applied, see EU Directive Annex 7a.

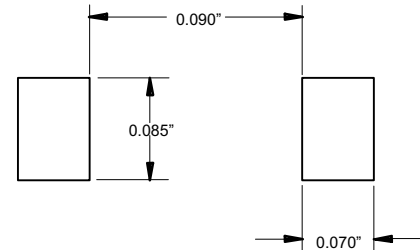
## 2.0 Amp Glass Passivated Rectifier 50 to 1000 Volts

### DO-214AC (SMA) (LEAD FRAME)



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.079	.096	2.00	2.44	
B	.050	.064	1.27	1.63	
C	.002	.008	.05	.20	
D	---	.02	---	.51	
E	.030	.060	.76	1.52	
F	.065	.091	1.65	2.32	
G	.189	.220	4.80	5.59	
H	.157	.181	4.00	4.60	
J	.090	.115	2.25	2.92	

### SUGGESTED SOLDER PAD LAYOUT



# GS2A-L thru GS2M-L

Figure 1  
Typical Forward Characteristics

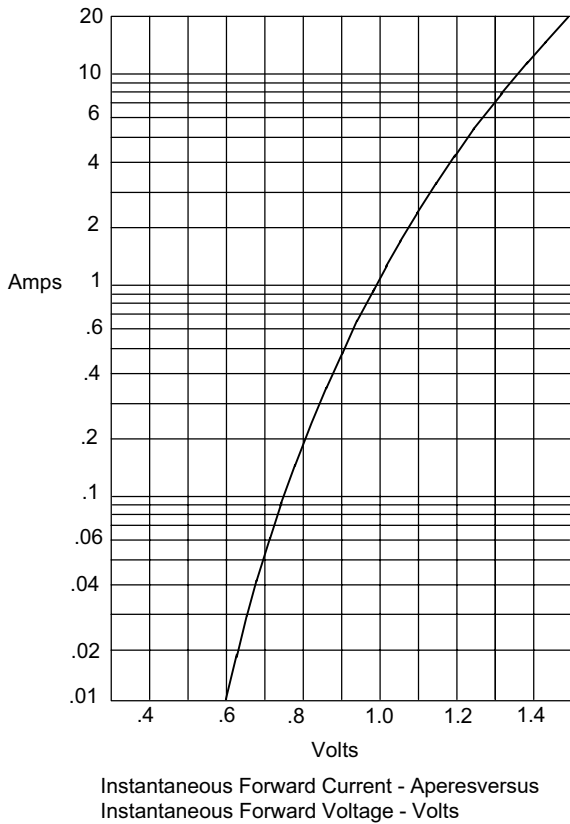


Figure 3  
Maximum Overload Surge Current

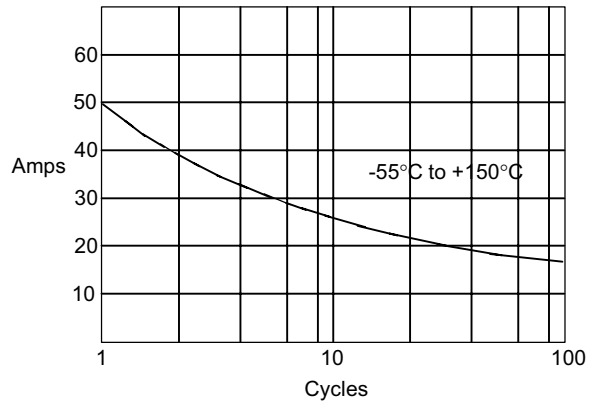


Figure 4  
Forward Derating Curve

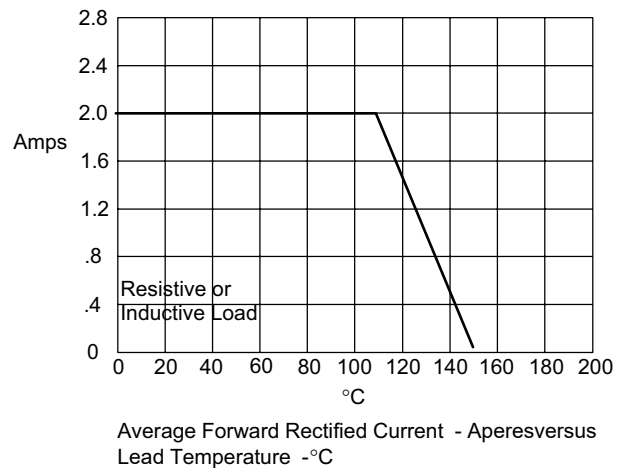
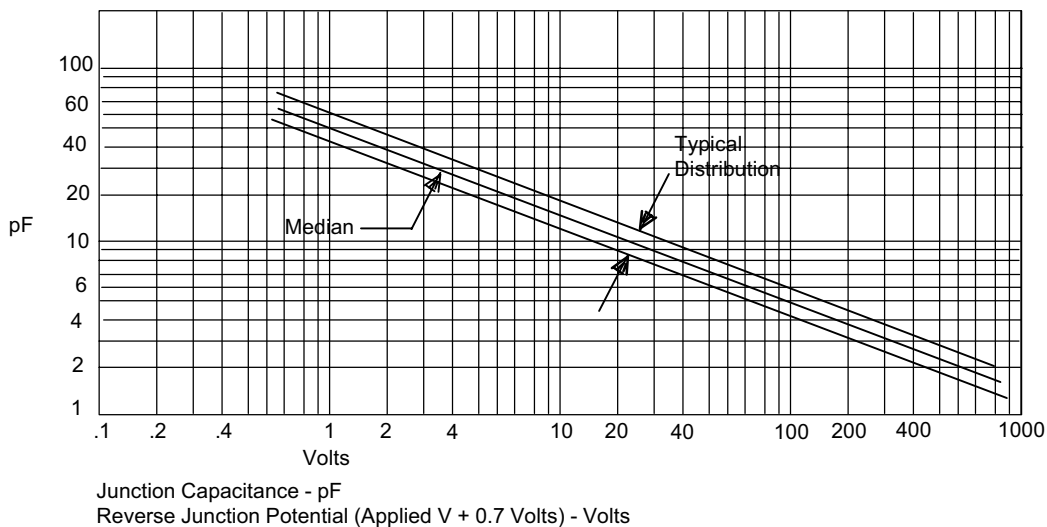


Figure 2  
Junction Capacitance





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Ordering Information :

Device	Packing
GS2A-LTP~GS2M-LTP	Tape&Reel: 7.5Kpcs/Reel

Note : Adding "-HF" suffix for halogen free, eg. GS2A-LTP-HF-GS2M-LTP-HF

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