



Micro Commercial Components

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GS1AG THRU GS1MG

Features

- For Surface Mount Applications
- Extremely Low Thermal Resistance
- Easy Pick And Place
- High Temp Soldering: 250°C for 10 Seconds At Terminals

1.0 Amp Glass Passivated Rectifier 50 to 1000 Volts

Maximum Ratings

- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C
- Maximum Thermal Resistance; 15°C/W Junction To Lead

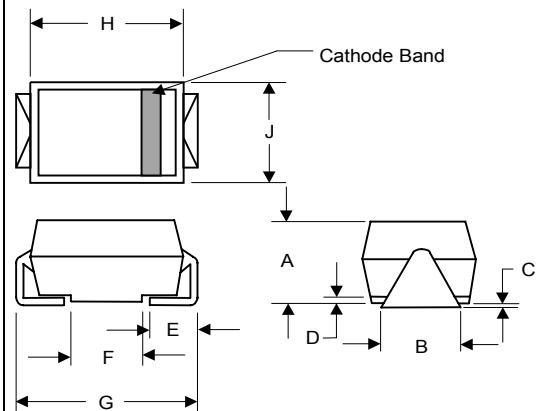
MCC Catalog Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
GS1AG	GS1A	50V	35V	50V
GS1BG	GS1B	100V	70V	100V
GS1DG	GS1D	200V	140V	200V
GS1GG	GS1G	400V	280V	400V
GS1JG	GS1J	600V	420V	600V
GS1KG	GS1K	800V	560V	800V
GS1MG	GS1M	1000V	700V	1000V

Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward current	$I_{F(AV)}$	1.0A	$T_J = 75^\circ\text{C}$
Peak Forward Surge Current	I_{FSM}	30A	8.3ms, half sine,
Maximum Instantaneous Forward Voltage	V_F	1.1V	$I_{FM} = 1.0\text{A};$ $T_J = 25^\circ\text{C}^*$
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	10 μA 50 μA	$T_J = 25^\circ\text{C}$ $T_J = 125^\circ\text{C}$
Typical Junction Capacitance	C_J	15pF	Measured at 1.0MHz, $V_R=4.0\text{V}$

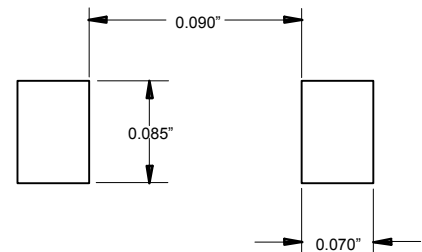
*Pulse test: Pulse width 300 μsec , Duty cycle 2%

DO-214AC (SMAJ) (High Profile)



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.078	.116	1.98	2.95	
B	.067	.089	1.70	2.25	
C	.002	.008	.05	.20	
D	---	.02	---	.51	
E	.035	.065	.89	1.40	
F	.065	.096	1.65	2.45	
G	.205	.224	5.21	5.69	
H	.160	.180	4.06	4.57	
J	.100	.112	2.57	2.84	

SUGGESTED SOLDER PAD LAYOUT



GS1AG thru GS1MG

Figure 1
Typical Forward Characteristics

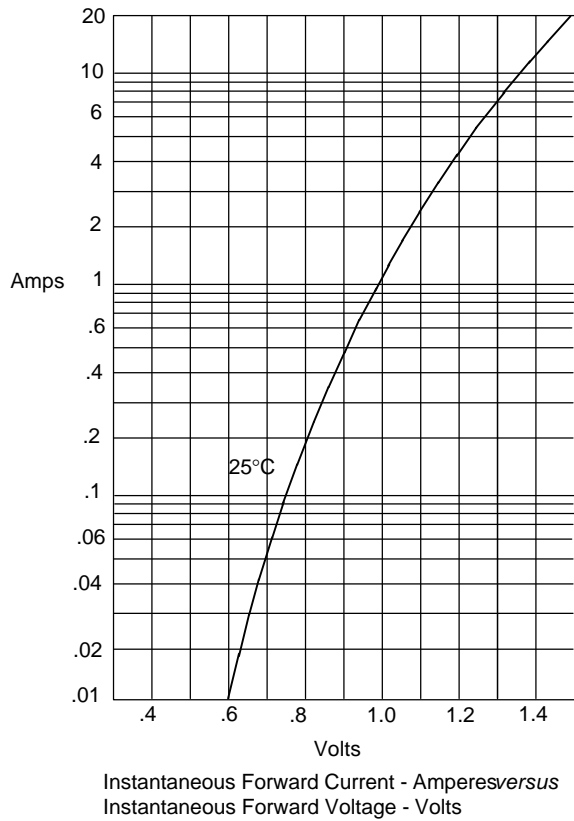


Figure 3
Maximum Overload Surge Current

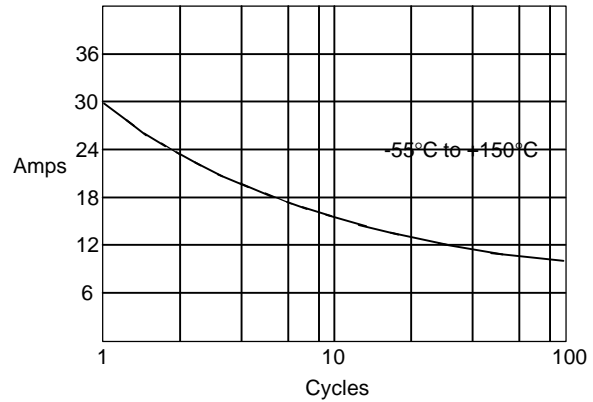


Figure 4
Forward Derating Curve

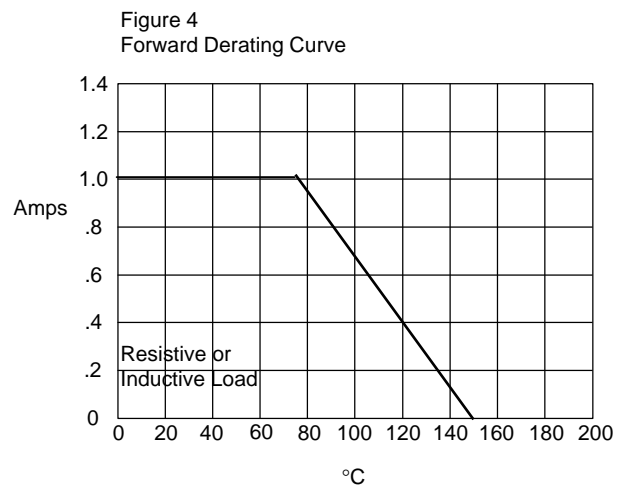
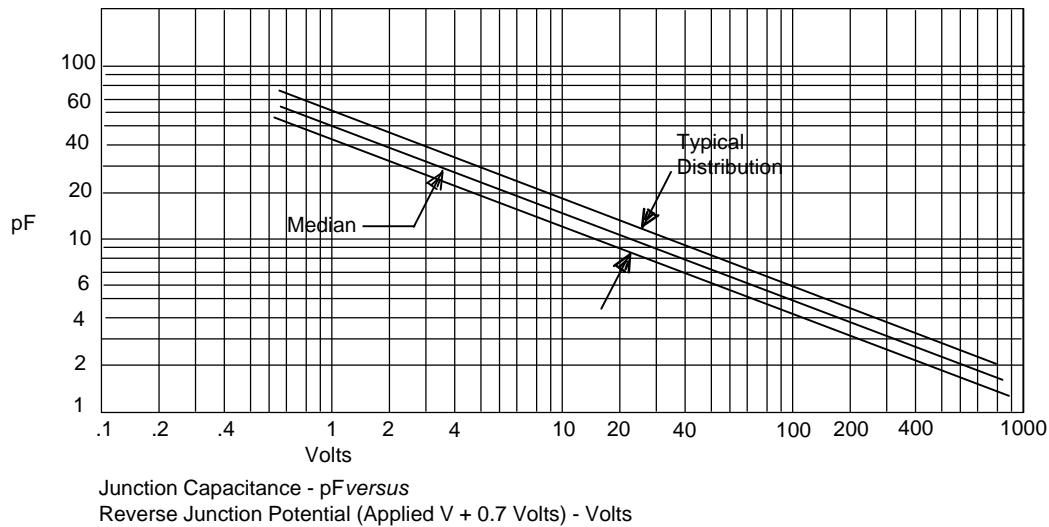


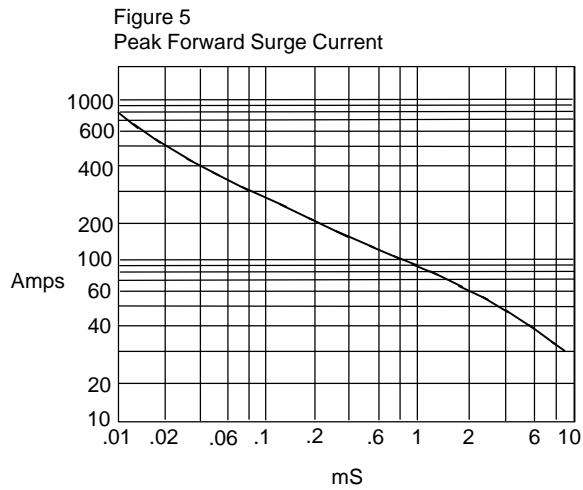
Figure 2
Junction Capacitance



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Peak Forward Surge Current - Amperes versus
Pulse Duration - Milliseconds (mS)

