



Micro Commercial Components



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 20736 Marilla Street Chatsworth  
 CA 91311  
 Phone: (818) 701-4933  
 Fax: (818) 701-4939

# GS1A THRU GS1M

## Features

- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Low Thermal Resistance
- High Temp Soldering: 260°C for 10 Seconds At Terminals
- Lead Free Finish/Rohs Compliant (Note1) ("P" Suffix designates Compliant. See ordering information)

## 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
GS1A	GS1A	50V	35V	50V
GS1B	GS1B	100V	70V	100V
GS1D	GS1D	200V	140V	200V
GS1G	GS1G	400V	280V	400V
GS1J	GS1J	600V	420V	600V
GS1K	GS1K	800V	560V	800V
GS1M	GS1M	1000V	700V	1000V

## Electrical Characteristics @ 25°C Unless Otherwise Specified

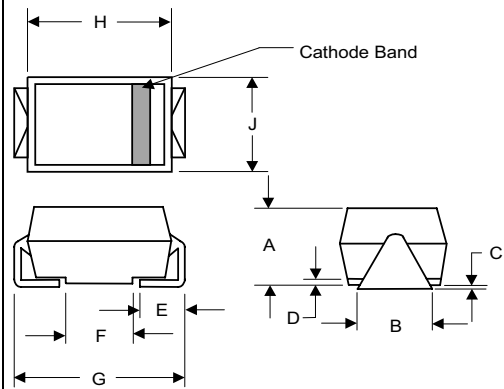
Average Forward current	$I_{F(AV)}$	1.0A	$T_a = 75^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	30A	8.3ms, half sine,
Maximum Instantaneous Forward Voltage	$V_F$	1.1V	$I_{FM} = 1.0\text{A};$ $T_J = 25^\circ\text{C}^*$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	10 $\mu\text{A}$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

\*Pulse test: Pulse width 300  $\mu\text{sec}$ , Duty cycle 2%

Note: 1. High Temperature Solder Exemptions Applied, see EU Directive Annex 7.

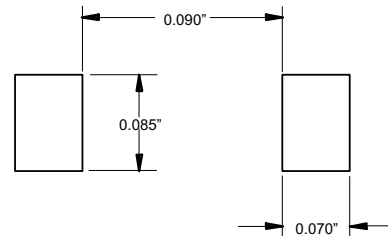
## 1 Amp Silicon Rectifier 50 to 1000 Volts

### DO-214AC (HSMA) (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	.055	.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



# GS1A thru GS1M



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Figure 1  
Typical Forward Characteristics

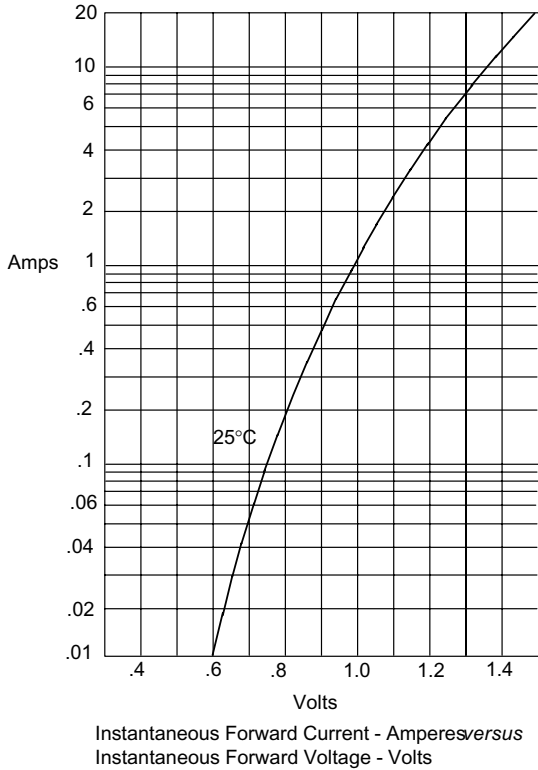
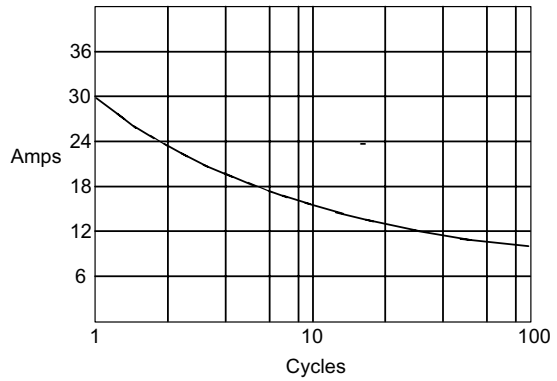
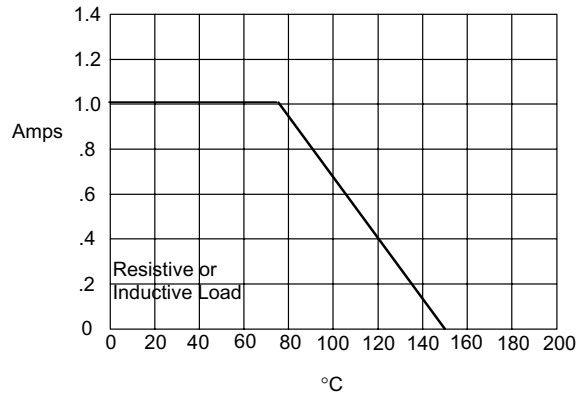


Figure 3  
Maximum Overload Surge Current



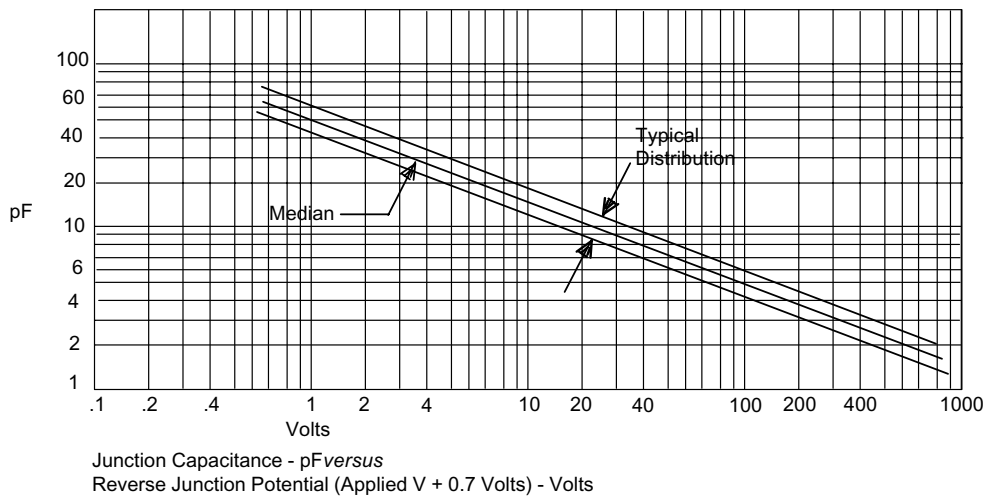
Peak Forward Current - Amperes versus Number of Cycles at 60Hz

Figure 4  
Forward Derating Curve



Average Forward Rectified Current - Amperes versus Ambient Temperature - °C

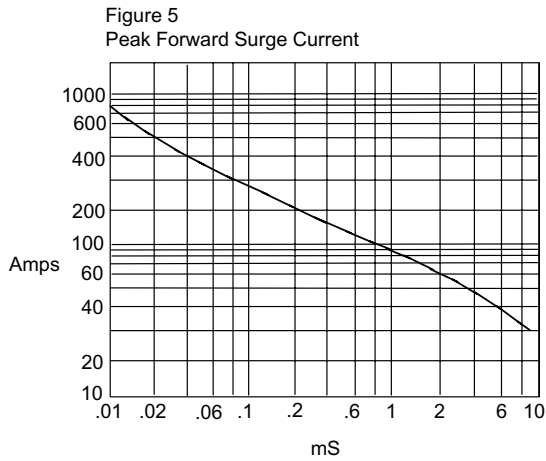
Figure 2  
Junction Capacitance



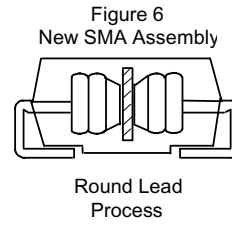
# GS1A thru GS1M



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





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### Ordering Information :

Device	Packing
Part Number-TP	Tape&Reel: 3Kpcs/Reel

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