

MCC

Micro Commercial Components



Micro Commercial Components
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**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

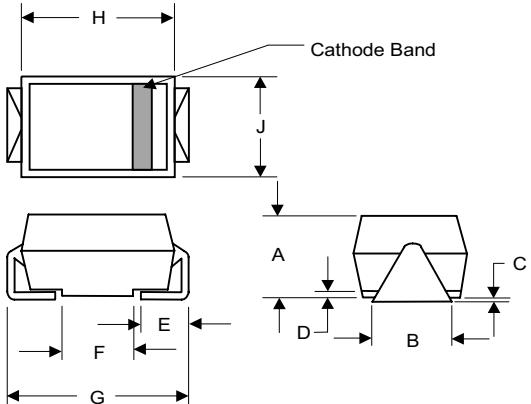
Average Forward current	$I_{F(AV)}$	1.0A	$T_a = 75^\circ\text{C}$
Peak Forward Surge Current	I_{FSM}	30A	8.3ms, half sine,
Maximum Instantaneous Forward Voltage	V_F	1.1V	$I_{FM} = 1.0\text{A}; T_J = 25^\circ\text{C}^*$
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	$10\mu\text{A}$ $50\mu\text{A}$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

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

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

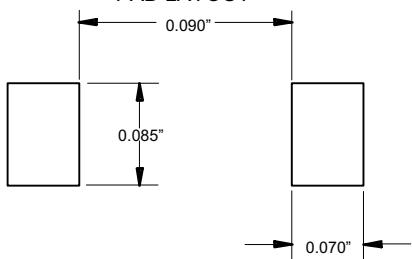
**1 Amp
Silicon Rectifier
50 to 1000 Volts**

**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

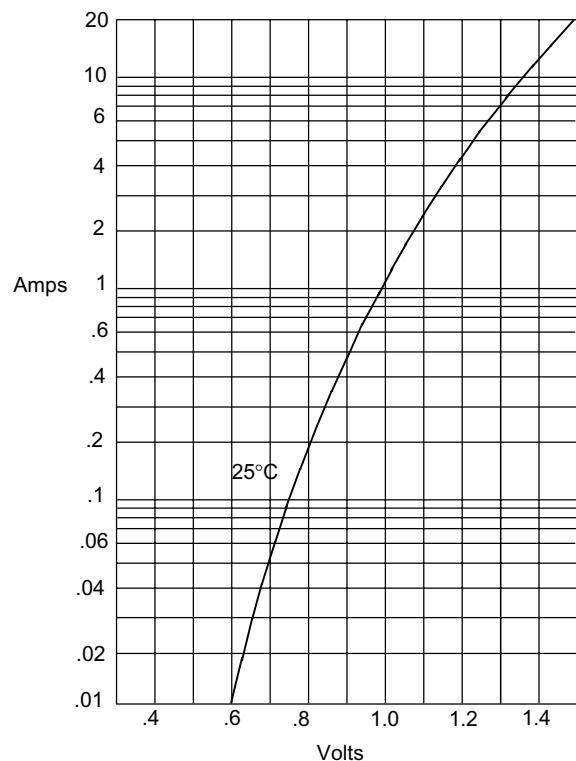


GS1A thru GS1M

•M•C•C•

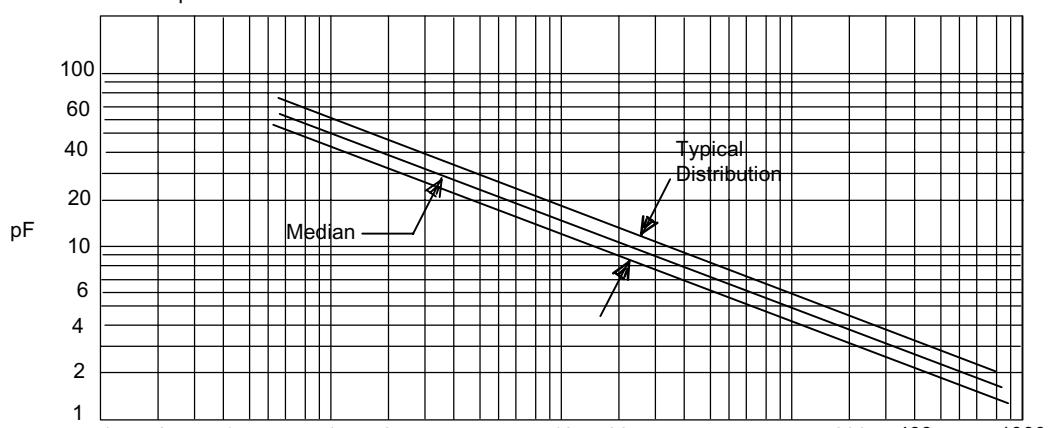
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Figure 1
Typical Forward Characteristics



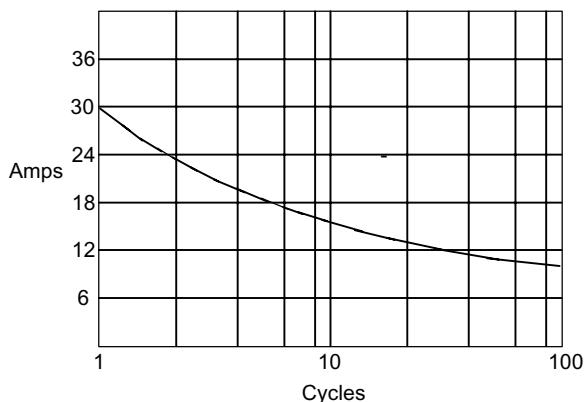
Instantaneous Forward Current - Amperesversus
Instantaneous Forward Voltage - Volts

Figure 2
Junction Capacitance



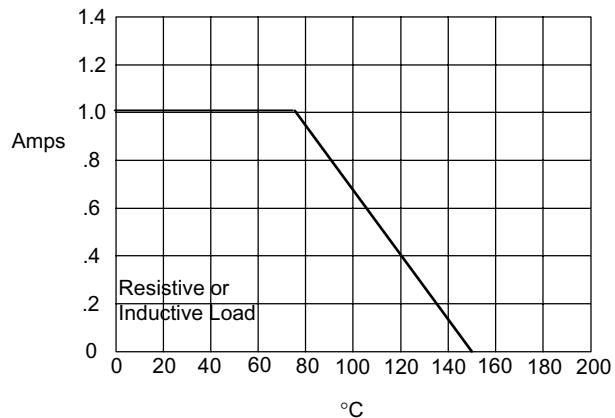
Junction Capacitance - pFversus
Reverse Junction Potential (Applied V + 0.7 Volts) - Volts

Figure 3
Maximum Overload Surge Current



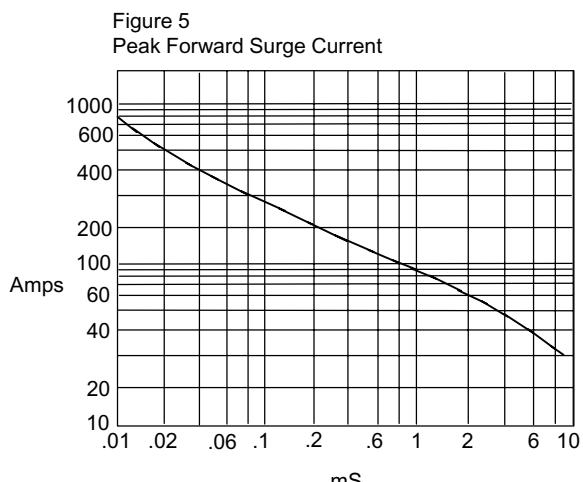
Peak Forward Current - Amperesversus
Number of Cycles at 60Hz

Figure 4
Forward Derating Curve



Average Forward Rectified Current - Amperesversus
Ambient Temperature - °C

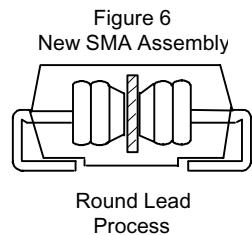
GS1A thru GS1M



Peak Forward Surge Current - Amperesversus
Pulse Duration - Milliseconds (mS)

•M•C•C•

TM
Micro Commercial Components



Round Lead
Process

Ordering Information :

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

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