

**Micro Commercial Components** 

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# GS1A THRU GS1M

## **Features**

- Extremely Low Thermal Resistance
- High Temp Soldering: 260 °C for 10 Seconds At Terminals

## 1 Amp Silicon Rectifier 50 to 1000 Volts

### **Maximum Ratings**

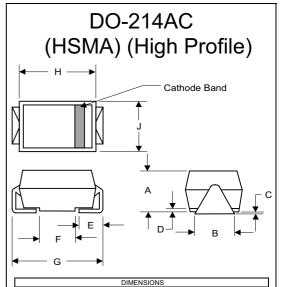
- Operating Temperature: -55°C to +150°C
   Storage Temperature: -55°C to +150°C
- Maximum Thermal Resistance; 15 °C/W Junction To Lead

MCC	Device	Maximum	aximum Maximum	
Catalog	Marking	Recurrent RMS		DC
Number		Peak Reverse Voltage		Blocking
		Voltage	_	Voltage
GS1A	GS1A	50V	50V 35V	
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

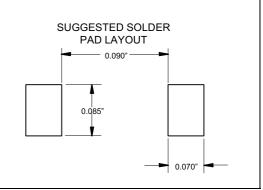
### Electrical Characteristics @ 25°C Unless Otherwise Specified

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Average Forward current	I <sub>F(AV)</sub>	1.0A	T <sub>J</sub> = 75°C			
Peak Forward Surge Current	I <sub>FSM</sub>	30A	8.3ms, half sine,			
Maximum Instantaneous Forward Voltage	$V_{F}$	1.1V	I <sub>FM</sub> = 1.0A; T <sub>J</sub> = 25°C*			
Maximum DC Reverse Current At Rated DC Blocking Voltage	I <sub>R</sub>	10μΑ 50μΑ	T <sub>J</sub> = 25°C T <sub>J</sub> = 125°C			
Typical Junction Capacitance	CJ	15pF	Measured at 1.0MHz, V <sub>R</sub> =4.0V			

<sup>\*</sup>Pulse test: Pulse width 300  $\mu$ sec, Duty cycle 2%



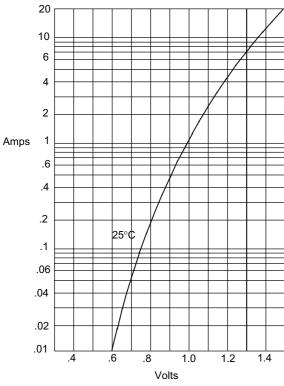
	INCHES		MM		
DIM	MIN	MAX	MIN	MAX	NOTE
Α	.078	.116	1.98	2.95	
В	.067	.089	1.70	2.25	
С	.002	.008	.05	.20	
D	-	.02	_	.51	
E	.035	.055	.89	1.40	
F	.065	.096	1.65	2.45	
G	.205	.224	5.21	5.69	
Н	.160	.180	4.06	4.57	
J	.100	.112	2.57	2.84	



### GS1A thru GS1M

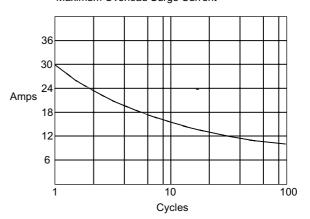


Figure 1
Typical Forward Characteristics



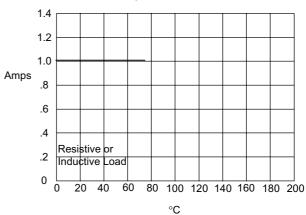
Instantaneous Forward Current - Amperes*versus* Instantaneous Forward Voltage - Volts

Figure 3 Micro Commercial Components
Maximum Overload Surge Current



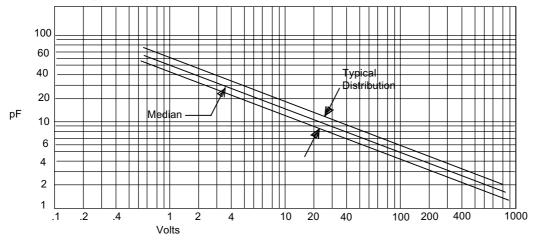
Peak Forward Current - Amperesversus Number of Cycles at 60Hz

Figure 4
Forward Derating Curve



Average Forward Rectified Current - Amperes/ersus Ambient Temperature - $^{\circ}$ C

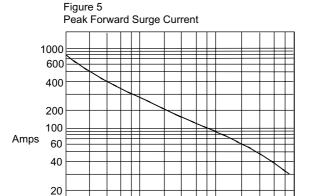
Figure 2 Junction Capacitance



Junction Capacitance - pF*versus*Reverse Junction Potential (Applied V + 0.7 Volts) - Volts

## GS1A thru GS1M

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

mS

.6

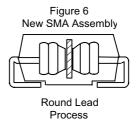
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