



Micro Commercial Components 20736 Marilla Street Chatsworth CA 91311

Phone: (818) 701-4933 (818) 701-4939 Fax:

# **GS1AE THRU GS1ME**

### **Features**

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

# **1.0 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

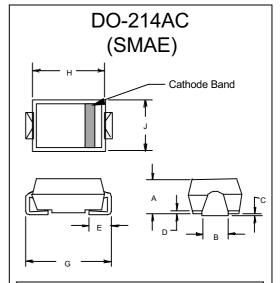
MCC	Device	Maximum	Maximum	Maximum
Catalog	Marking	Recurrent	RMS	DC
Number		Peak Reverse	Voltage	Blocking
		Voltage		Voltage
GS1AE	GS1A	50V	35V	50V
GS1BE	GS1B	100V	70V	100V
GS1DE	GS1D	200V	140V	200V
GS1GE	GS1G	400V	280V	400V
GS1JE	GS1J	600V	420V	600V
GS1KE	GS1K	800V	560V	800V
GS1ME	GS1M	1000V	700V	1000V

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

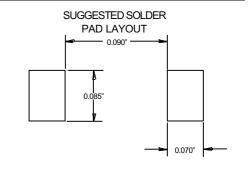
Average Forward current	$I_{F(AV)}$	1.0A	T <sub>J</sub> = 75°C
Peak Forward Surge Current	I <sub>FSM</sub>	30A	8.3ms, half sine,
Maximum Instantaneous Forward Voltage	$V_{F}$	1.1V	I <sub>FM</sub> = 1.0A; T <sub>J</sub> = 25°C*
Maximum DC Reverse Current At Rated DC Blocking Voltage	I <sub>R</sub>	10μΑ 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 µsec, Duty cycle 2%

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



DIMENSIONS						
	INCHES		MM			
DIM	MIN	MAX	MIN	MAX	NOTE	
Α	.079	.096	2.01	2.44		
В	.050	.075	1.27	1.90		
С	.002	.008	.05	.20		
D	_	.02		.51		
E	.030	.060	.76	1.52		
G	.189	.208	4.80	5.30		
Н	.157	.180	4.00	4.57		
J	.090	.115	2.29	2.92		



## GS1AE thru GS1ME



Figure 2 Micro Commercial Components

Figure 1
Typical Forward Characteristics

10

1.0

Amps

0.1

0.01

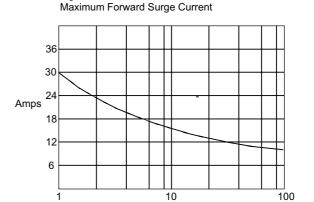
0.4

0.6

0.8

1.0

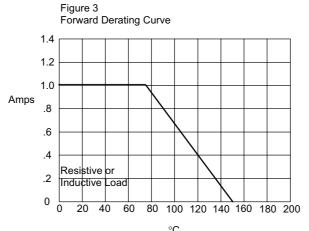
1.2



Instantaneous Forward Current - Amperes versus Instantaneous Forward Voltage - Volts

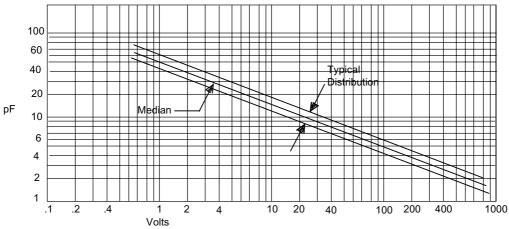
Peak Forward Current - Amperesversus Number of Cycles at 60Hz

Cycles



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

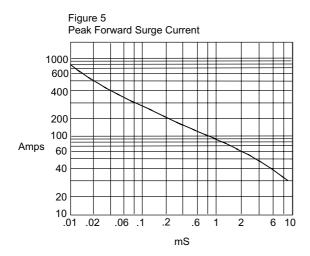




Junction Capacitance - pF*versus* Reverse Junction Potential (Applied V + 0.7 Volts) - Volts

# GS1AE thru GS1ME





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



#### **Micro Commercial Components**

### **Ordering Information:**

Device	Packing	
Part Number-TP	Tape&Reel: 6Kpcs/Reel	

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