Micro Commercial Components

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GS1AFL THRU GS1MFL

1.0 Amp Glass Passivated Rectifier 50 to 1000 Volts

Features

- Halogen free available upon request by adding suffix "-HF"
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Extremely 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; 13°C/W Junction To Lead

MCC Catalog Number	Device Marking	Maximum Reccurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
GS1AFL	GS1A	50V	35V	50V
GS1BFL	GS1B	100V	70V	100V
GS1DFL	GS1D	200V	140V	200V
GS1GFL	GS1G	400V	280V	400V
GS1JFL	GS1J	600V	420V	600V
GS1KFL	GS1K	800V	560V	800V
GS1MFL	GS1M	1000V	700V	1000V

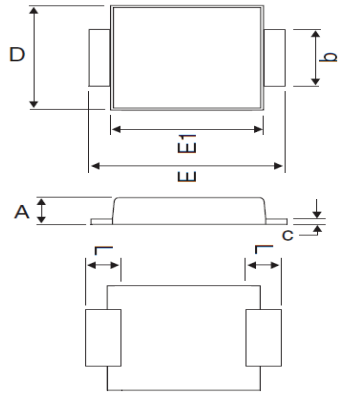
Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward current	$I_{F(AV)}$	1.0A	T_L = 110°C
Peak Forward Surge Current	I_{FSM}	30A	8.3ms, half sine,
Maximum Instantaneous Forward Voltage	V_F	1.0V	I_{FM} = 1.0A; T_J = 25°C*
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	10μA 50μA	T_J = 25°C T_J = 125°C
Typical Junction Capacitance	C_J	15pF	Measured at 1.0MHz, V_R=4.0V

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

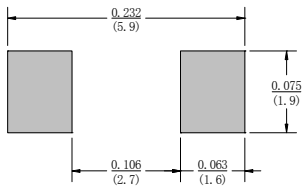
Note 1: High Temperature Solder Exemptions Applied, see EU Directive Annex 7.

DO-221AC
(SMA-FL)



DIMENSIONS					
	INCHES		MM		
DIM	MIN	MAX	MIN	MAX	NOTE
A	.035	.047	0.90	1.20	
b	.049	.065	1.25	1.65	
C	.004	.016	0.10	0.40	
D	.089	.116	2.25	2.95	
E	.173	.220	4.40	5.60	
E1	.126	181	3.20	4.60	
L	.028	.059	0.70	1.50	

SUGGESTED SOLDER PAD LAYOUT



GS1AFL thru GS1MFL

Figure 1
Typical Forward Characteristics

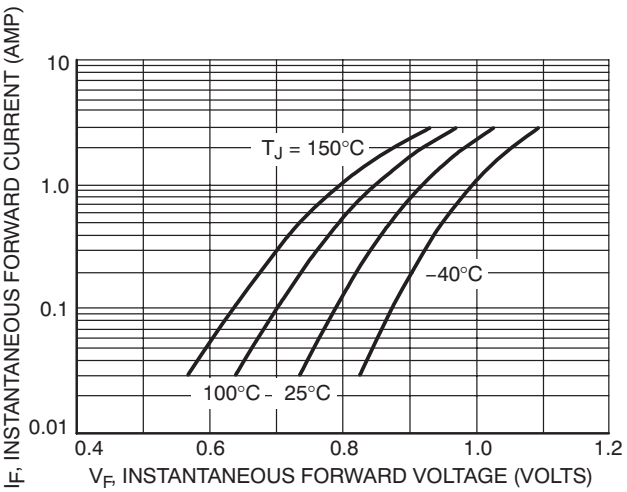
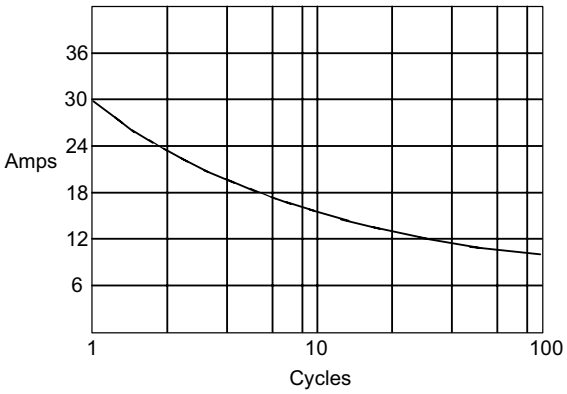
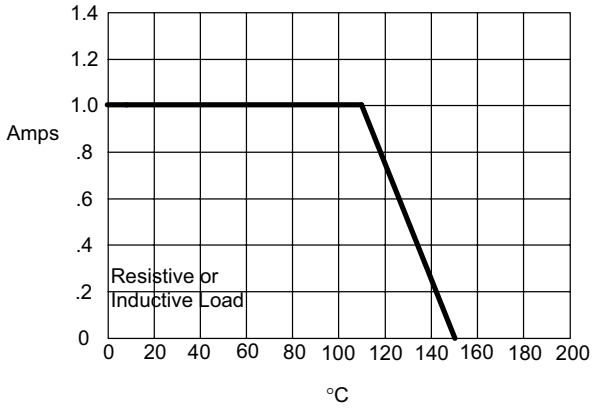


Figure 3
Maximum Overload Surge Current



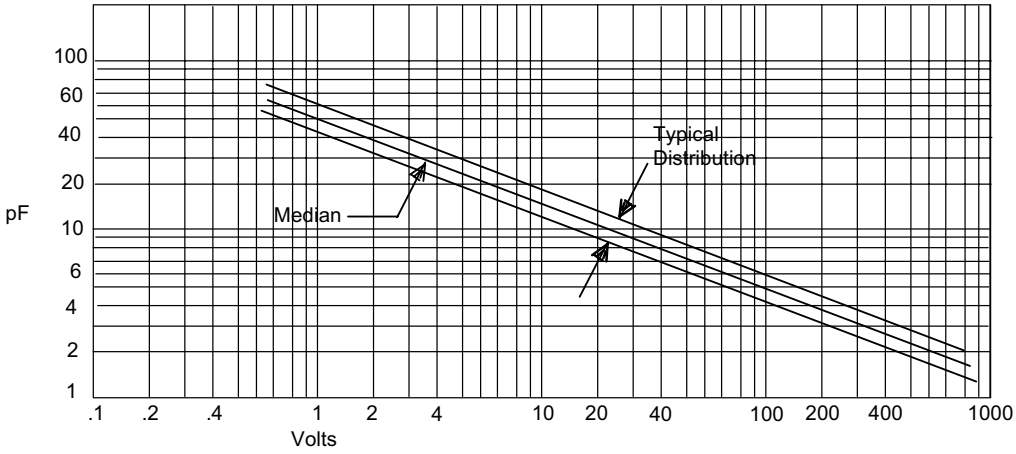
Peak Forward Current - Amperes*versus*
Number of Cycles at 60Hz

Figure 4
Forward Derating Curve



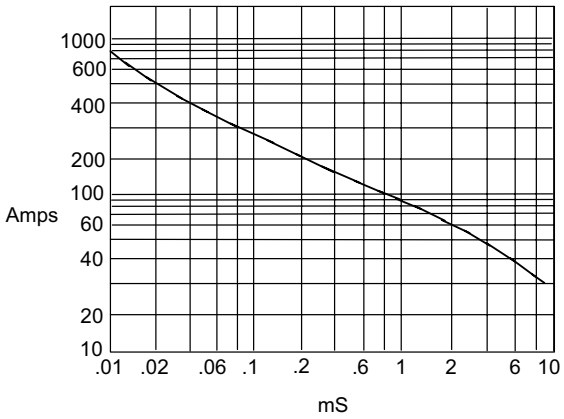
Average Forward Rectified Current - Amperes*versus*
Lead Temperature -°C

Figure 2
Junction Capacitance



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

Figure 5
Peak Forward Surge Current



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

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Ordering Information :

Device	Packing
Part Number-TP	Tape&Reel: 10Kpcs/Reel

Note : Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF