

## GS2AFL THRU GS2MFL

### 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 Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
GS2AFL	GS2A	50V	35V	50V
GS2BFL	GS2B	100V	70V	100V
GS2DFL	GS2D	200V	140V	200V
GS2GFL	GS2G	400V	280V	400V
GS2JFL	GS2J	600V	420V	600V
GS2KFL	GS2K	800V	560V	800V
GS2MFL	GS2M	1000V	700V	1000V

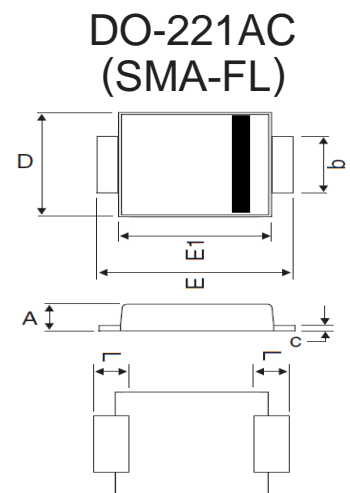
### Electrical Characteristics @ 25 °C Unless Otherwise Specified

Average Forward current	$I_{F(AV)}$	2.0A	$T_L = 110^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	50A	8.3ms, half sine,
Maximum Instantaneous Forward Voltage	$V_F$	1.1V	$I_{FM} = 2.0A$ ; $T_J = 25^\circ\text{C}^*$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	5 $\mu\text{A}$ 125 $\mu\text{A}$	$T_J = 25^\circ\text{C}$ $T_J = 125^\circ\text{C}$
Typical Junction Capacitance	$C_J$	20pF	Measured at 1.0MHz, $V_R=4.0V$
Maximum Reverse Recovery Time	$T_{rr}$	2.1us(Typ.) 4us(Max)	$I_F=0.5A$ , $I_R=1.0A$ , $I_{rr}=0.25A$

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

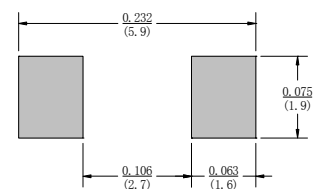
Note 1: High Temperature Solder Exemptions Applied, see EU Directive Annex 7a.

## 2.0 Amp Glass Passivated Rectifier 50 to 1000 Volts



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
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



# GS2AFL thru GS2MFL

Figure 1  
Typical Forward Characteristics

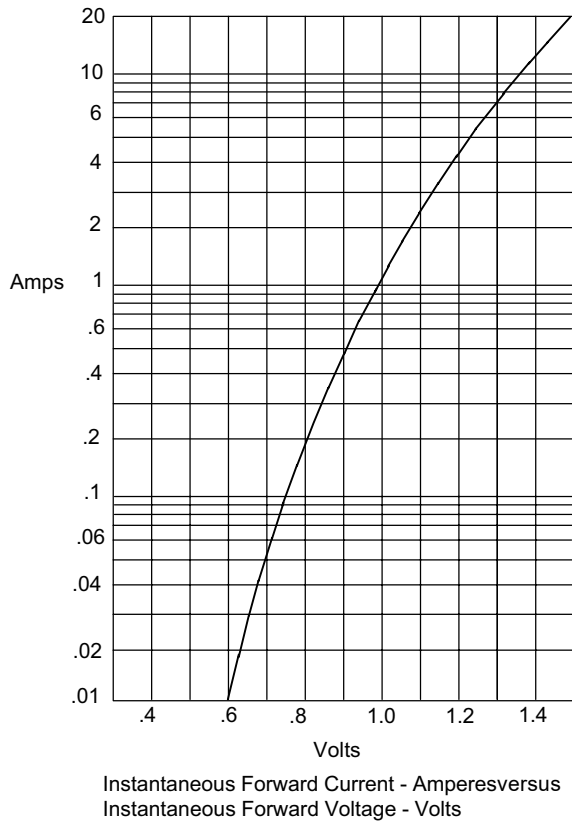


Figure 3  
Maximum Overload Surge Current

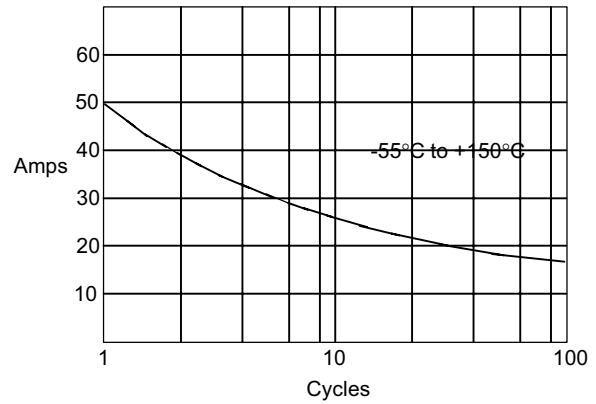


Figure 4  
Forward Derating Curve

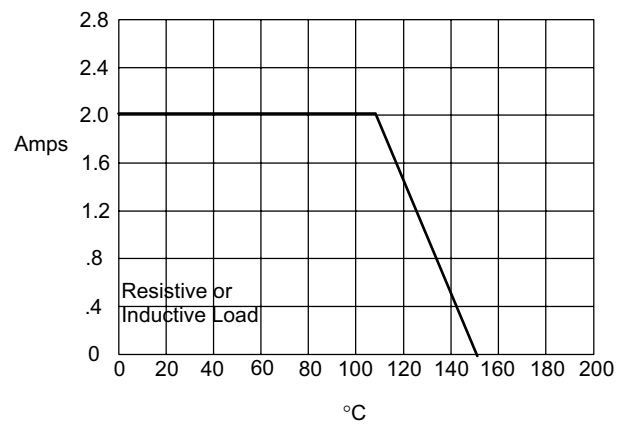
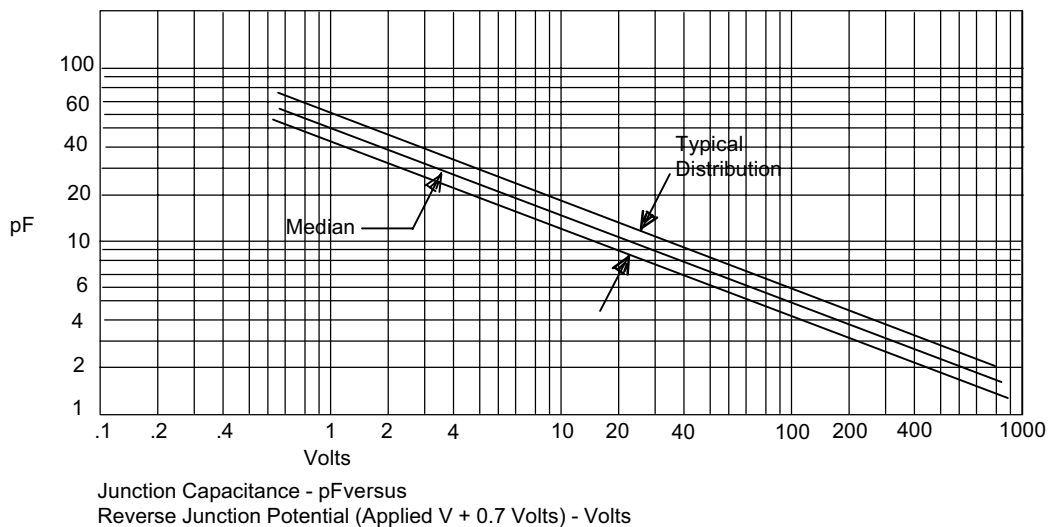


Figure 2  
Junction Capacitance



## Ordering Information :

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

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

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