



Micro Commercial Components



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GS1A-TPS05 THRU GS1M-TPS05

1.0 Amp Silicon Rectifier 50 to 1000 Volts

Features

- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix designates RoHS Compliant. See ordering information)
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- For Surface Mount Applications
- Extremely Low Thermal Resistance
- High Temp Soldering: 260°C for 10 Seconds At Terminals
- Thermal Tape and Pre-flat Structure

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-TPS05	GS1A	50V	35V	50V
GS1B-TPS05	GS1B	100V	70V	100V
GS1D-TPS05	GS1D	200V	140V	200V
GS1G-TPS05	GS1G	400V	280V	400V
GS1J-TPS05	GS1J	600V	420V	600V
GS1K-TPS05	GS1K	800V	560V	800V
GS1M-TPS05	GS1M	1000V	700V	1000V

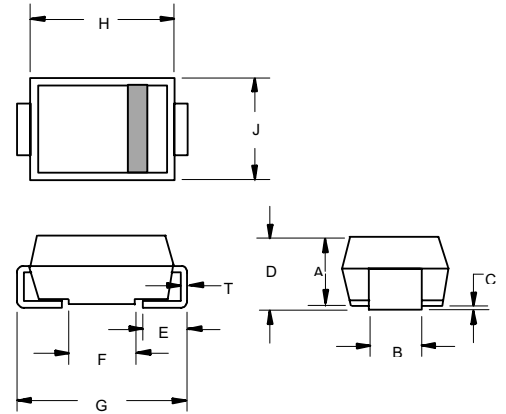
Electrical Characteristics @ 25°C Unless Otherwise Specified

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

Notes: 1. High Temperature Solder Exemption Applied, see EU Directive Annex Notes 7.

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

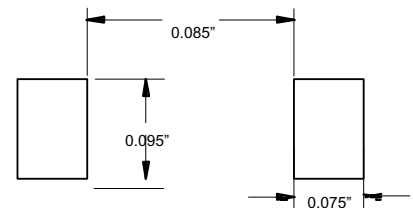
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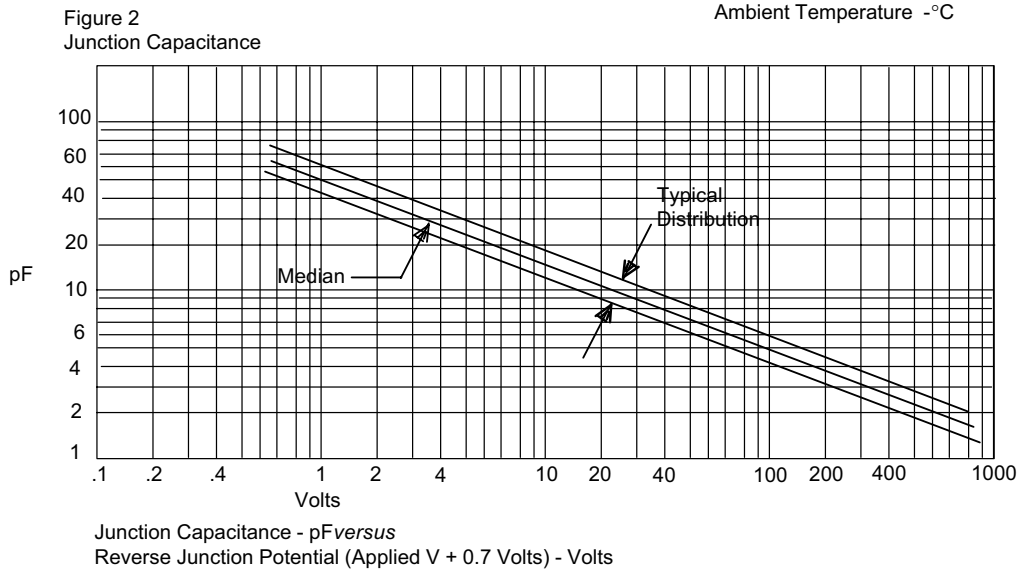
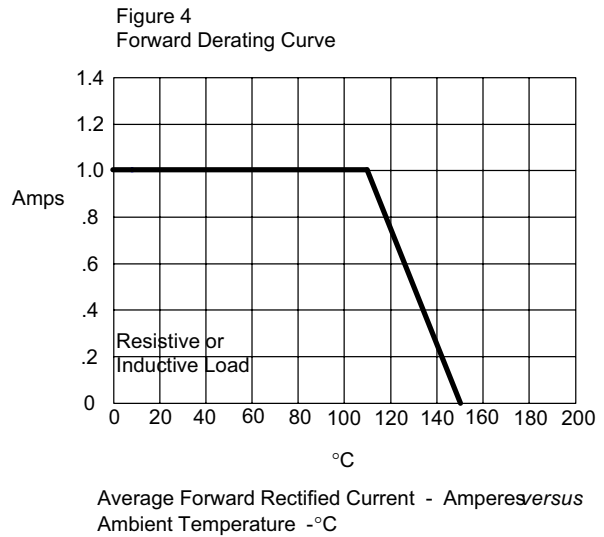
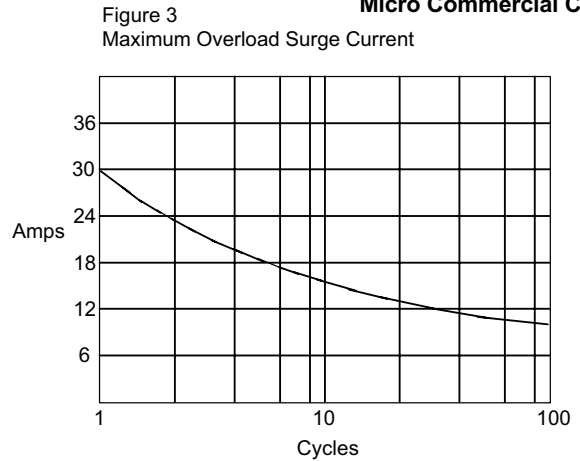
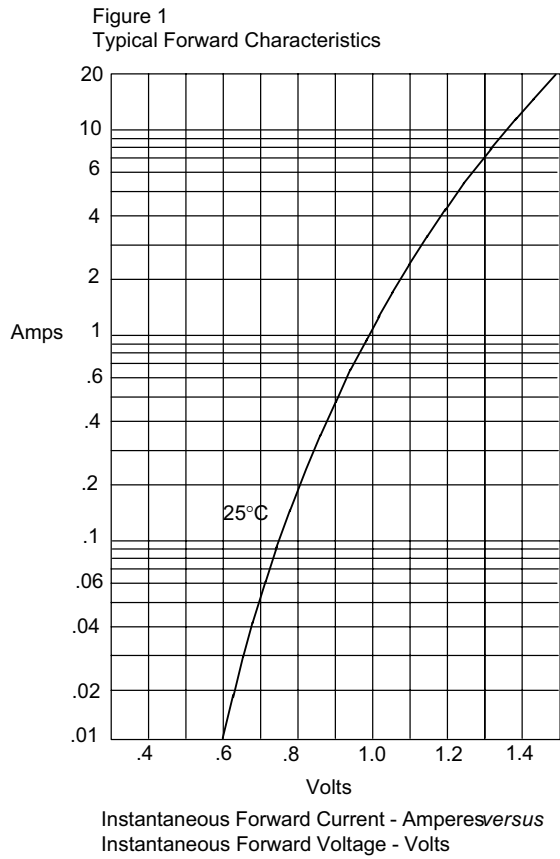
DIMENSIONS

DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.079	.091	2.00	2.32	
B	.055	.063	1.40	1.60	
C	.002	.008	0.05	0.20	
D	---	.096	---	2.44	
E	.041	.045	1.05	1.15	
F	.075	.083	1.90	2.10	
G	.189	.201	4.80	5.10	
H	.161	.177	4.10	4.50	
J	.094	.102	2.40	2.60	
T	.006	.012	0.16	0.30	

SUGGESTED SOLDER



GS1A-TPS05 thru GS1M-TPS05

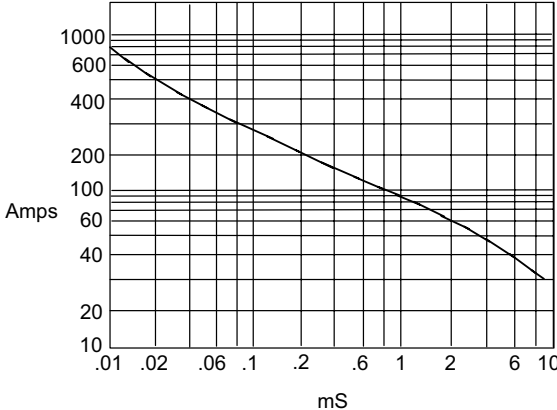


GS1A-TPS05 thru GS1M-TPS05



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Figure 5
Peak Forward Surge Current



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



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Ordering Information :

Device	Packing
GS1A-TPS05~GS1M-TPS05	Tape&Reel: 6Kpcs/Reel

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