Features

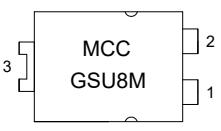
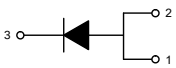
- Halogen Free. "Green" Device (Note 1)
- High Surge Forward Current Capability
- Glass Passivated Chip Junction
- For Surface Mount Applications
- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 1
- Lead Free Finish/RoHS Compliant (Note 2)("P" Suffix Designates RoHS Compliant. See Ordering Information)

8 Amp Glass Passivated Rectifier 1000 Volts

Maximum Ratings @ 25°C (Unless Otherwise Specified)

Parameter	Symbol	Value	Unit
Peak Repetitive Reverse Voltage	V_{RRM}	1000	V
Working Peak Reverse Voltage	V_{RWM}		
DC Blocking Voltage	V_R		
RMS Reverse Voltage	V_{RMS}	700	V
Average Rectified Forward Current @ T_L=80°C	$I_{F(AV)}$	8	A
Non-Repetitive Peak Surge Current @ 8.3ms Half Sine Wave	I_{FSM}	200	A
Non-Repetitive Peak Surge Current @ 1ms Square Wave		400	
Current Squared Time @1ms≤t≤8.3ms	I^2t	166	A^2s

Internal Structure

Pin	Description	Simplified Outline	Graphic Symbol
3	Cathode		
1,2	Anode		

Note: 1. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.

2. High Temperature Solder Exemption Applied, see EU Directive Annex 7a.

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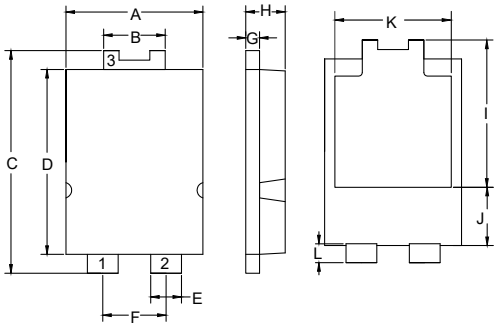
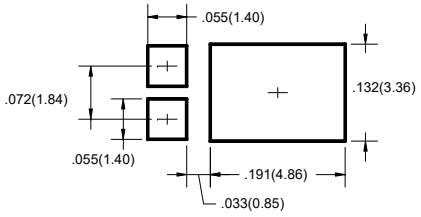


DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.154	0.161	3.90	4.10	
B	0.067	0.075	1.70	1.90	
C	0.252	0.260	6.40	6.60	
D	0.209	0.217	5.30	5.50	
E	0.031	0.039	0.80	1.00	
F	0.071	0.075	1.80	1.90	
G	0.014	0.018	0.35	0.45	
H	0.043	0.047	1.10	1.20	
I	0.161	0.177	4.10	4.50	
J	0.059	0.075	1.50	1.90	
K	0.114	0.134	2.90	3.40	
L	0.022	0.030	0.55	0.75	

Suggested Solder Pad Layout



Thermal characteristics

Symbol	Parameter	Conditions	Min	Typ	Max	Unit
T_J	Operating Junction Temperature Range		-55		150	°C
T_{stg}	Storage Temperature Range		-55		150	°C
$Rth_{(J-C)}$	Thermal Resistance from Junction to Case			8		°C/W
$Rth_{(J-A)}$	Thermal Resistance from Junction to Ambient			75		°C/W

Electrical Characteristics @ 25°C Unless Otherwise Specified

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Forward Voltage	V_F	I_F=8A;T_J=25°C I_F=8A;T_J=125°C		0.94 0.84	1.10 0.92	V
Reverse Current	I_R	at Rated V_R;T_J=25°C at Rated V_R;T_J=125°C			5 500	μA
Junction Capacitance	C_J	V_R=4V;f=1MHz;T_J=25°C		55		pF
Reverse Recovery Time	t_{rr}	I_F=0.5A,I_R=1.0A, I_{rr}=0.25A ;T_J=25°C		4300		nS

Curve Characteristics

Fig. 1 - Forward Current Derating Curve

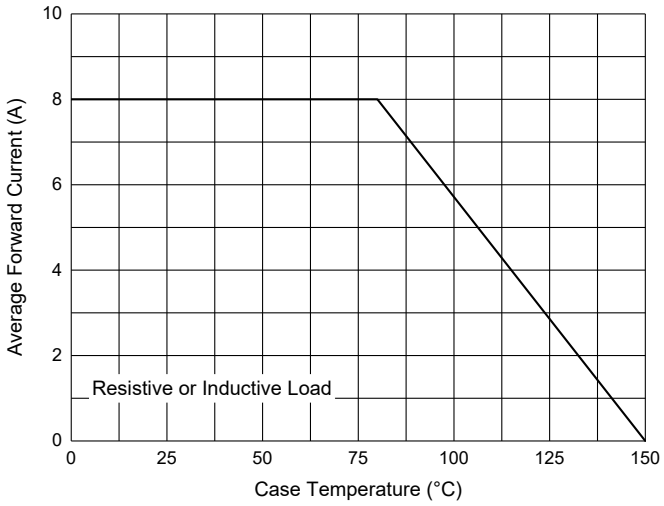


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

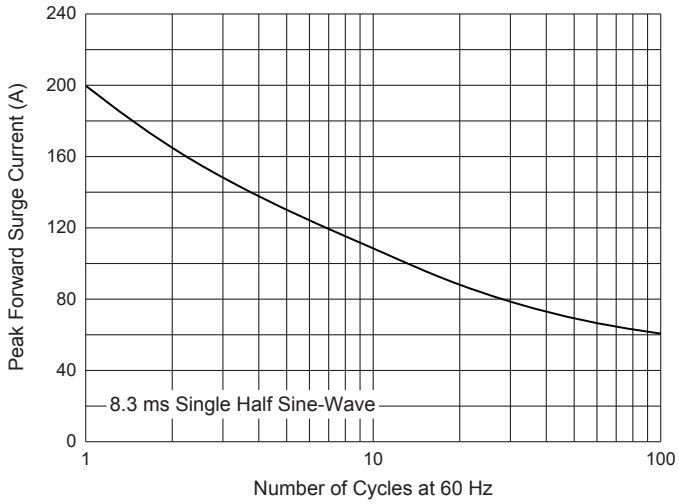


Fig. 3 - Typical Forward Characteristics

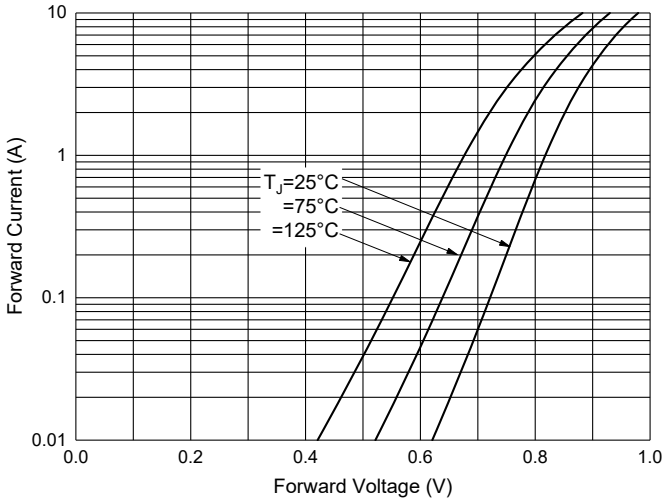


Fig. 4 - Typical Reverse Characteristics

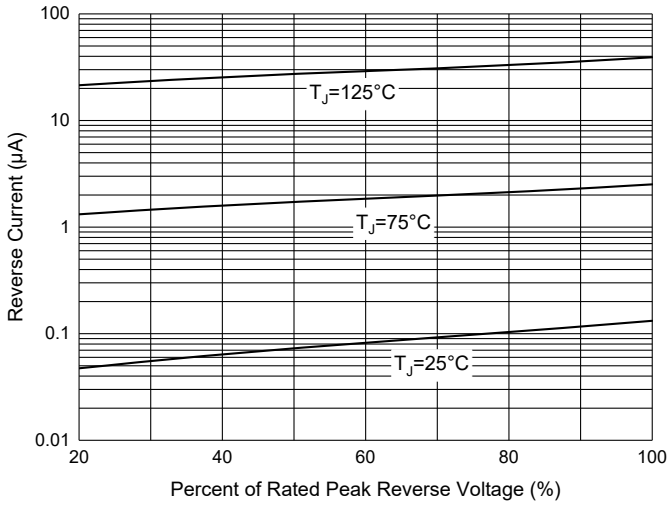
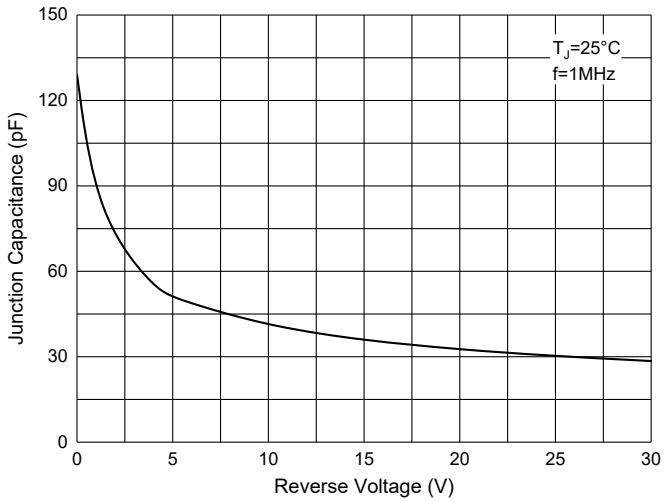


Fig. 5 - Typical Capacitance Characteristics



Ordering Information

Device	Packing
Part Number-TP	Tape&Reel:4Kpcs/Reel