

Features

- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix Designates Compliant. See Ordering Information)
- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 1
- Super Fast Recovery Times With EPI Die For High Efficiency
- Halogen Free. "Green" Device (Note 2)

Maximum Ratings

- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Typical Thermal Resistance: 25°C/W Junction to Lead
- Typical Thermal Resistance: 35°C/W Junction to Ambient

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage	Working Peak Reverse Voltage
MURS3G	MURS3G	400V	280V	400V	300V

Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	3.0A	$T_L=110^\circ\text{C}$
Peak Forward Surge Current	I_{FSM}	100A	8.3ms, Half Sine
Maximum Instantaneous Forward Voltage	V_F	1.0V 0.92V(typ)	$I_{FM}=3.0\text{A};$ $T_J=25^\circ\text{C}^*$
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	5.0µA 200µA	$T_J=25^\circ\text{C};$ $T_J=100^\circ\text{C}$
Maximum Reverse Recovery Time	T_{RR}	35ns	$I_F=0.5\text{A}; I_R=1.0\text{A};$ $I_{rr}=0.25\text{A}$
Pulse Energy in Avalanche Mode, Non Repetitive (Inductive Load Switch Off)	E_R	25mJ	$I_{(BR)R}=1\text{A}, T_J=25^\circ\text{C}$
Typical Junction Capacitance	C_J	40pF	Measured at 1.0MHz, $V_R=4.0\text{V}$

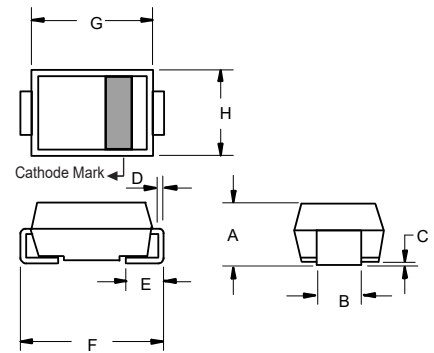
*Pulse Test: Pulse Width 300 µsec, Duty Cycle 2%

Note:

1. High Temperature Solder Exemptions Applied, See EU Directive Annex 7a.
2. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.

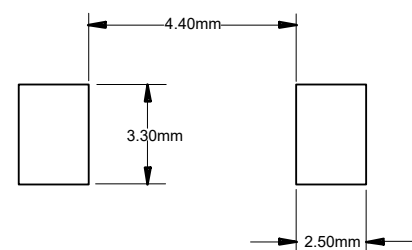
3 Amp Super Fast Recovery Rectifier 400 Volts

SMC (DO-214AB)



DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	0.079	0.103	2.00	2.62	
B	0.108	0.128	2.75	3.25	
C	0.002	0.008	0.051	0.203	
D	0.006	0.012	0.152	0.305	
E	0.030	0.060	0.76	1.52	
F	0.305	0.320	7.75	8.13	
G	0.260	0.280	6.60	7.11	
H	0.220	0.245	5.59	6.22	

Suggested Solder Pad Layout



Curve Characteristics

Fig. 1 - Forward Current Derating Curve

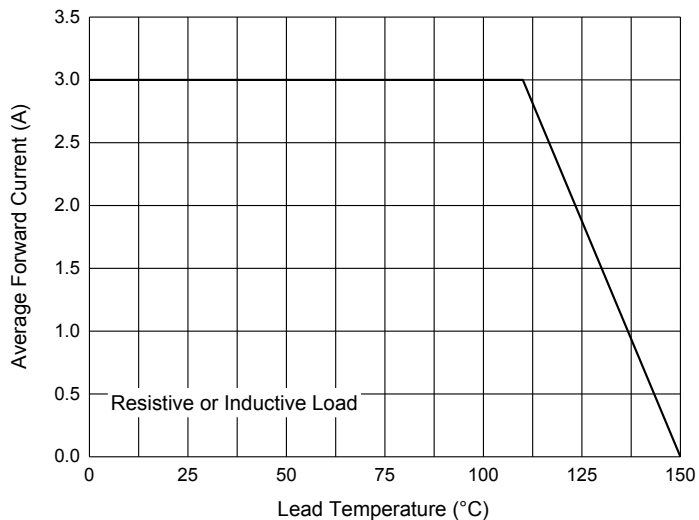


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

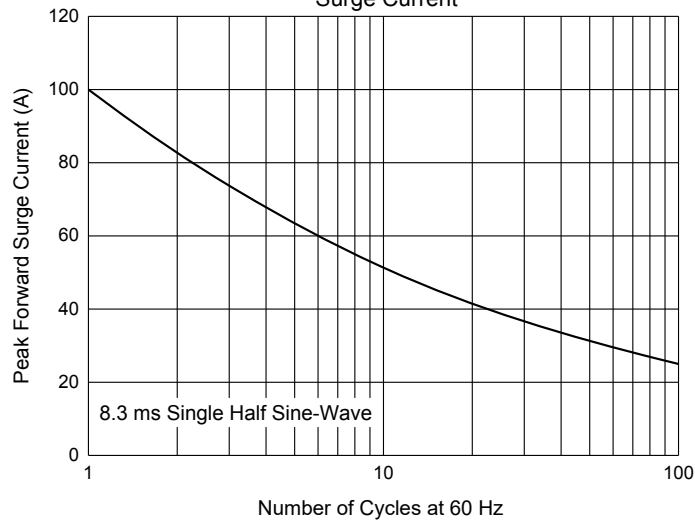


Fig. 3 - Typical Instantaneous Forward Characteristics

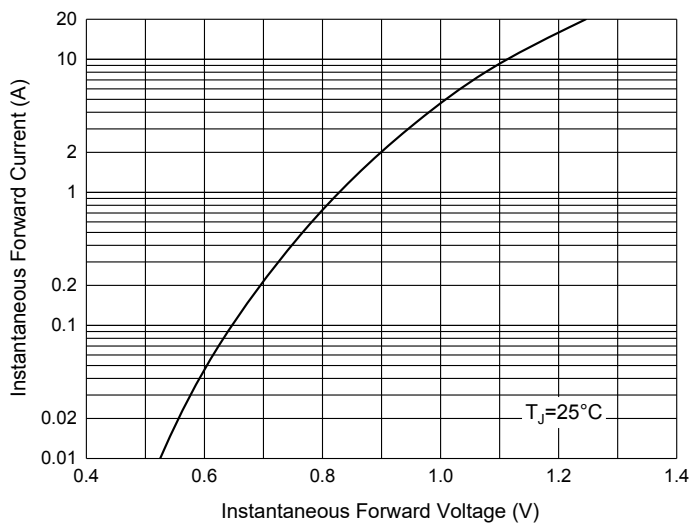
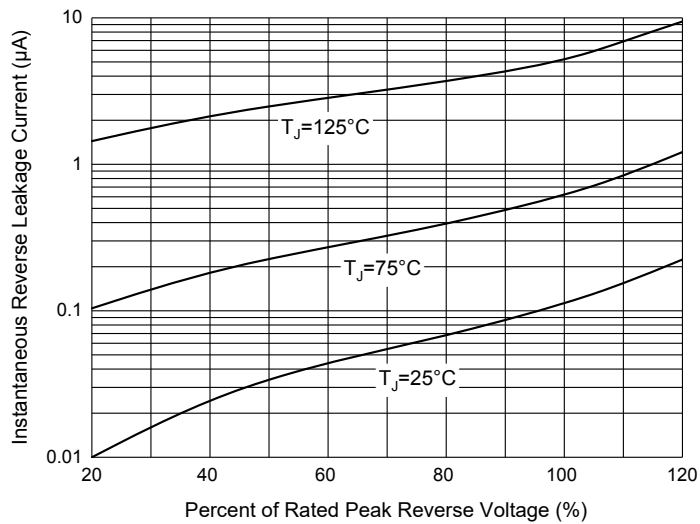


Fig. 4 - Typical Reverse Leakage Characteristics



Ordering Information

Device	Packing
Part Number-TP	Tape&Reel: 3Kpcs/Reel

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