

Features

- Halogen Free Available Upon Request By Adding Suffix "-HF"
- Fast Reverse Recovery Time
- High Frequency Operation
- Epoxy Meets UL 94 V-0 Flammability Rating
- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix Designates Compliant. See Ordering Information)
- Planar Structure Die and Soft Recovery Characteristics

Maximum Ratings

- Operating Junction Temperature Range: -55°C to +175°C
- Storage Temperature Range: -55°C to +175°C
- Typical Thermal Resistance: 1°C/W Junction to Case

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MUR3060PTH	MUR3060PTH	600V	420V	600V

Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Rectified Forward Current	$I_{F(AV)}$	30A	$T_C=125^\circ\text{C}$
Peak Forward Surge Current	I_{FSM}	150A	8.3ms, Half Sine
Instantaneous Forward Voltage	V_F	1.45V(Typ) 1.60V(Max) 1.40V(Max)	$I_F=15A; T_J=25^\circ\text{C}$ $I_F=15A; T_J=25^\circ\text{C}$ $I_F=15A; T_J=150^\circ\text{C}$
Maximum Reverse Current At Rated DC Blocking Voltage	I_R	5uA 200uA	$T_J=25^\circ\text{C};$ $T_J=150^\circ\text{C}$
Avalanche Energy	E_{AS}	140mJ	$T_P=40\mu\text{s}, L=15\text{mH},$ $T_J=25^\circ\text{C}$
Reverse Recovery Time	t_{rr}	26ns(Typ.) 35ns(Max.) 115ns(Typ.) 200ns(Typ.)	$I_F=0.5A; I_R=1.0A;$ $I_{RR}=0.25A$ $T_J=25^\circ\text{C}$ $T_J=125^\circ\text{C}$
Peak recovery current	I_{RRM}	5.0A(Typ.) 10.5A(Typ.)	$T_J=25^\circ\text{C}$ $T_J=125^\circ\text{C}$
Reverse recovery charge	Q_{rr}	285nC(Typ.) 1000nC(Typ.)	$T_J=25^\circ\text{C}$ $T_J=125^\circ\text{C}$

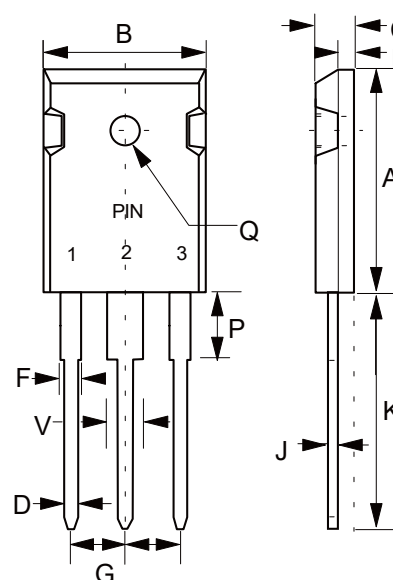
Note: 1. High Temperature Solder Exemptions Applied, see EU Directive Annex 7a.

Internal Structure



30 Amp Super Fast Recovery Rectifier 600 Volts

TO-247



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.787	0.866	20.00	22.00	
B	0.598	0.638	15.20	16.20	
C	0.185	0.208	4.70	5.30	
D	0.035	0.059	0.90	1.50	
E	0.059	0.094	1.50	2.40	
F	0.067	0.091	1.70	2.30	
J	0.019	0.031	0.48	0.80	
K	0.748	0.833	19.00	21.15	
P	0.122	0.189	3.10	4.80	
Q	0.118	0.150	3.00	3.80	φ
V	0.106	0.134	2.70	3.40	
G	0.197	0.224	5.00	5.70	

Curve Characteristics

Fig. 1 - Forward Current Derating Curve

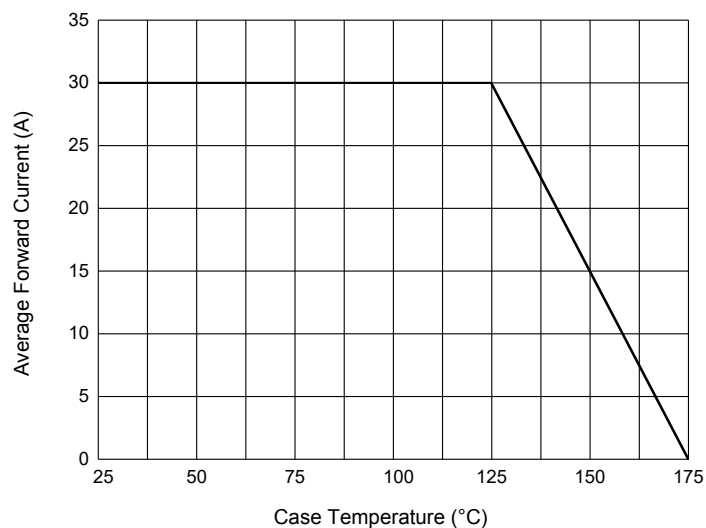


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

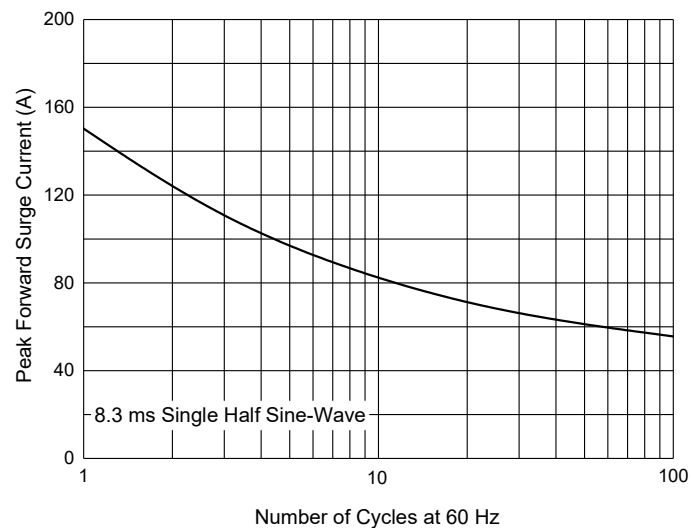


Fig. 3 - Typical Instantaneous Forward Characteristics

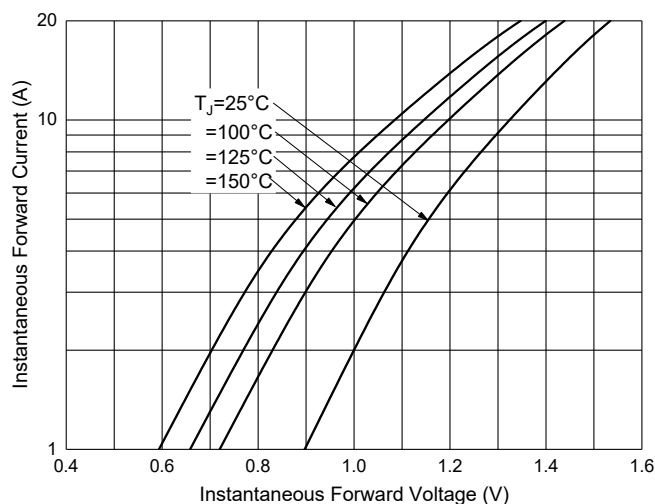
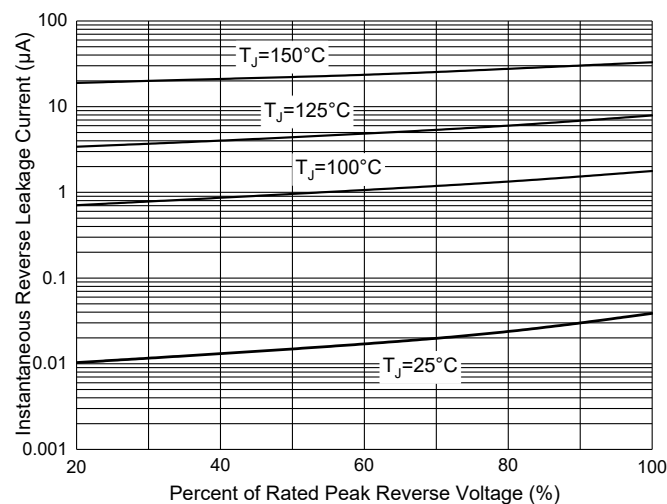


Fig. 4 - Typical Reverse Leakage Characteristics



Ordering Information

Device	Packing
Part Number-BP	Bulk:30pcs/Tube,360pcs/Box,1.8Kpcs/Carton

Note : Adding "-HF" Suffix For Halogen Free, eg. Part Number-BP-HF

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