



**THE DATASHEET OF
MUR30120B-BP**



Features

- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix Designates Compliant. See Ordering Information)
- Halogen Free Available Upon Request By Adding Suffix "-HF"
- High Frequency Operation
- High Surge Forward Current Capability
- Epoxy Meets UL 94 V-0 Flammability Rating
- 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: 1.0°C/W Junction to Case

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MUR30120B	MUR30120B	1200V	840V	1200V

Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Rectified Forward Current (Rated VR-20Khz Square Wave) - 50% duty cycle	$I_{F(AV)}$	30A	$T_C=100^\circ\text{C}$
Peak Forward Surge Current	I_{FSM}	300A	8.3ms, Half Sine
Maximum Instantaneous Forward Voltage	V_F	2.4V	$I_F=30\text{A}; T_A=25^\circ\text{C}$
Maximum Reverse Current At Rated DC Blocking Voltage	I_R	10µA 500µA	$T_A=25^\circ\text{C}; T_A=125^\circ\text{C}$
Maximum Reverse Recovery Time	T_{RR}	75ns	$I_F=0.5\text{A}; I_R=1.0\text{A}; I_{RR}=0.25\text{A}$

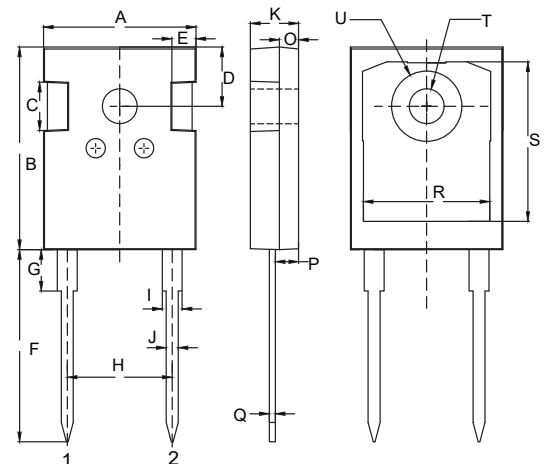
Note:1. High Temperature Solder Exemptions Applied, See EU Directive Annex 7a.

Internal Structure



**30 Amp
Ultra Fast
Recovery Rectifier
1200 Volts**

TO-247AD



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.602	0.642	15.30	16.30	
B	0.799	0.839	20.30	21.30	
C	0.189	0.205	4.80	5.20	
D	0.242		6.15		BSC.
E	0.091	0.106	2.30	2.70	
F	0.772	0.796	19.62	20.22	
G	----	0.169	----	4.30	
H	0.428		10.88		BSC.
I	0.075	0.087	1.91	2.21	
J	0.044	0.054	1.11	1.36	
K	0.189	0.205	4.80	5.20	
O	0.073	0.085	1.85	2.15	
P	0.087	0.103	2.21	2.61	
Q	0.020	0.030	0.51	0.75	
R	0.512	0.535	13.00	13.60	
S	0.640	0.663	16.25	16.85	
T	0.134	0.150	3.40	3.80	Φ
U	----	0.287	----	7.30	Φ

Curve Characteristics

Fig. 1 - Forward Current Derating Curve

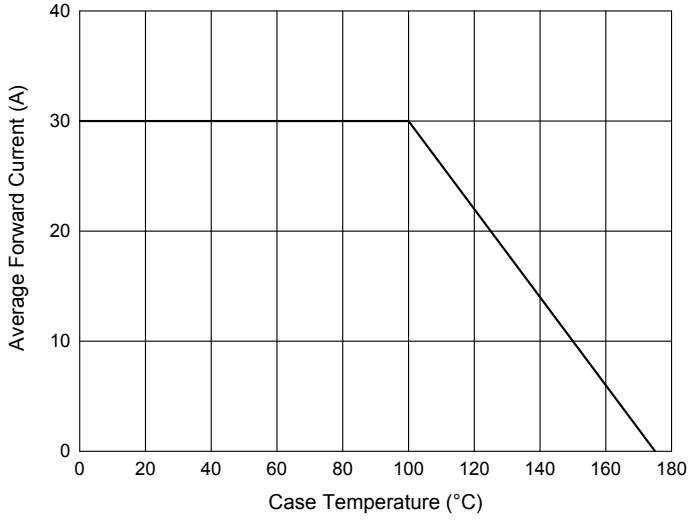


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

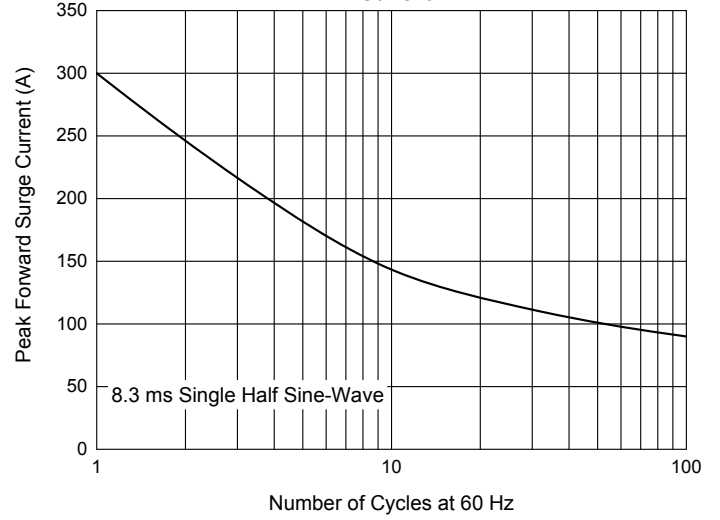


Fig. 3 - Typical Instantaneous Forward Characteristics

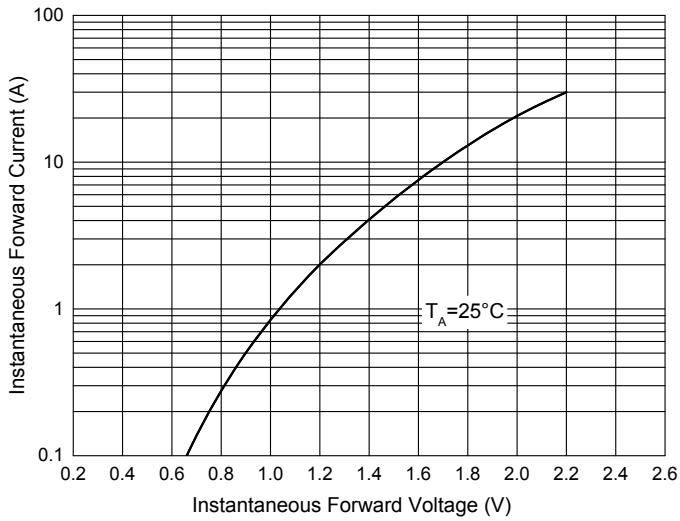
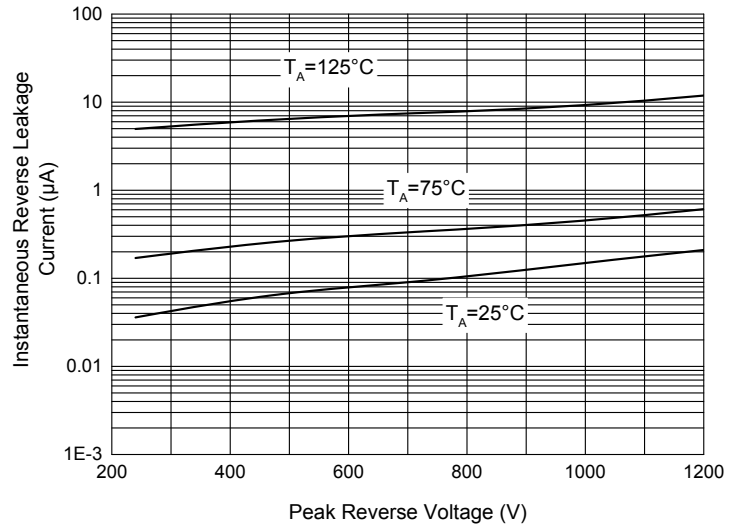


Fig. 4 - Typical Reverse Leakage Characteristics



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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