

**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 +150°C
- Storage Temperature Range: -55°C to +150°C
- 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
MUR3060BS	MUR3060BS	600V	420V	600V

**Electrical Characteristics @ 25°C Unless Otherwise Specified**

Average Rectified Forward Current	$I_{F(AV)}$	30A	$T_C=100^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	300A	8.3ms, Half Sine
Instantaneous Forward Voltage	$V_F$	1.50V(Typ.) 1.80V(Max.) 1.60V(Max.)	$I_{FM}=30A; T_J=25^\circ\text{C}$ $I_{FM}=30A; T_J=25^\circ\text{C}$ $I_{FM}=30A; T_J=125^\circ\text{C}$
Reverse Current At Rated DC Blocking Voltage	$I_R$	5 $\mu\text{A}$ (Max.) 200 $\mu\text{A}$ (Max.)	$T_J=25^\circ\text{C}$ $T_J=125^\circ\text{C}$
Current Squared Time	$I^2t$	373A <sup>2</sup> s	1ms $\leq t \leq$ 8.3ms, $T_J=25^\circ\text{C}$
Reverse Recovery Time	$t_{rr}$	35ns(Typ.) 45ns(Max.)	$I_F=0.5A; I_R=1.0A;$ $I_{RR}=0.25A$
		75ns(Typ.) 125ns(Typ.)	$T_J=25^\circ\text{C}$ $T_J=125^\circ\text{C}$
Peak recovery current	$I_{RRM}$	4.9A(Typ.) 12.8A(Typ.)	$T_J=25^\circ\text{C}$ $T_J=125^\circ\text{C}$ $I_F=30A$ $di_F/dt=-200A/\mu\text{s}$ $V_R=400V$
Reverse recovery charge	$Q_{rr}$	180nC(Typ.) 780nC(Typ.)	$T_J=25^\circ\text{C}$ $T_J=125^\circ\text{C}$

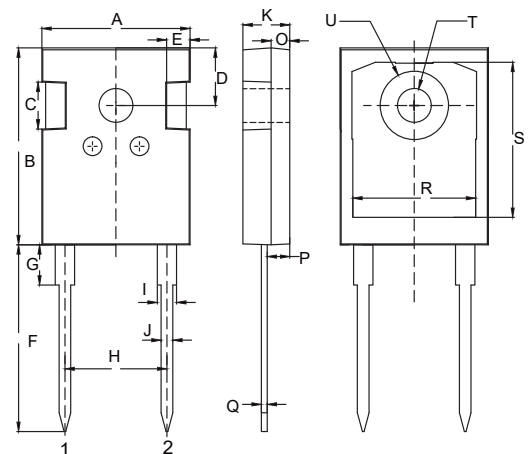
Note:1. High Temperature Solder Exemptions Applied, See EU Directive Annex 7a.

**Internal Structure**



**30 Amp  
Ultra Fast  
Recovery Rectifier  
600 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	0.768	0.807	19.50	20.50	
G	----	0.189	----	4.80	
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	$\Phi$
U	----	0.287	----	7.30	$\Phi$

**Curve Characteristics**

Fig. 1 - Forward Current Derating Curve

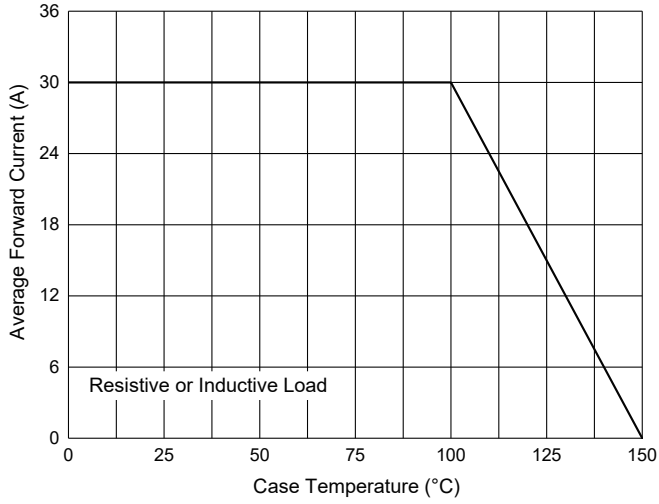


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

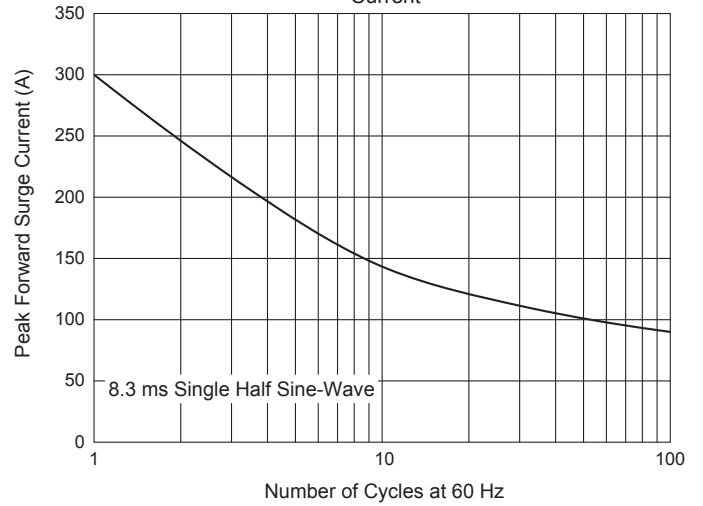


Fig. 3 - Typical Instantaneous Forward Characteristics

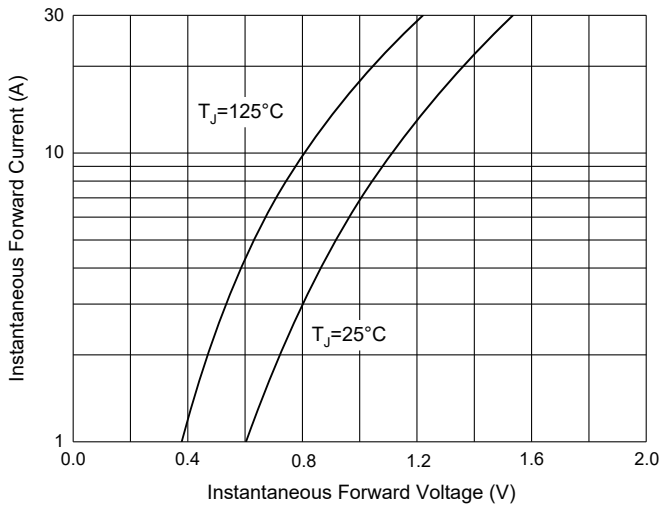
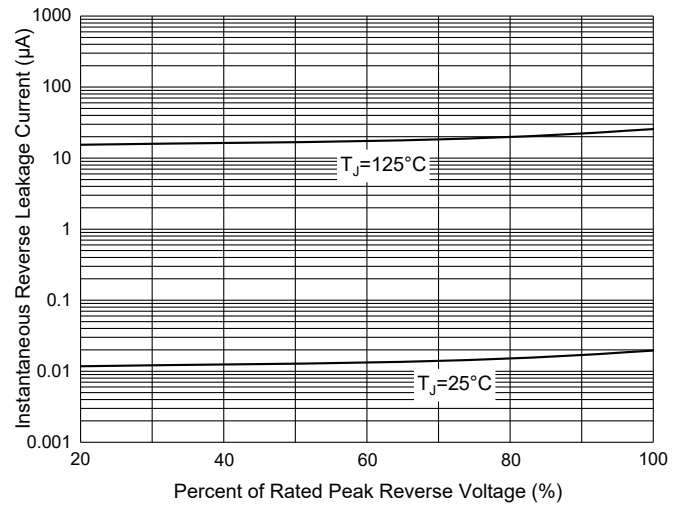


Fig. 4 - Typical Reverse Leakage Characteristics



## 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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