

Features

- Super Fast Switching For High Efficiency
- High Junction Temperature Capability
- Low Reverse Leakage
- High Forward Surge Current Capability
- Epoxy Meets UL 94 V-0 Flammability Rating
- Halogen Free Available Upon Request By Adding Suffix "-HF"
- 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: 0.5°C/W Junction to Case

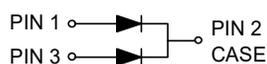
MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MUR6040PT	MUR6040PT	400V	280V	400V

Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Rectified Forward Current (Rated VR-20Khz Square Wave) - 50% Duty Cycle	$I_{F(AV)}$	60A	$T_C=120^\circ C$
Peak Forward Surge Current	I_{FSM}	480A	8.3ms, Half Sine
Instantaneous Forward Voltage	V_F	1.20V(Typ) 1.40V(Max) 1.20V(Max)	$I_{FM}=30A, T_J=25^\circ C$ $I_{FM}=30A, T_J=25^\circ C$ $I_{FM}=30A, T_J=125^\circ C$
Maximum Reverse Current At Rated DC Blocking Voltage	I_R	10µA 0.10mA	$T_J=25^\circ C$ $T_J=125^\circ C$
Maximum Reverse Recovery Time	t_{rr}	50ns	$I_F=0.5A; I_R=1.0A,$ $I_{RR}=0.25A$

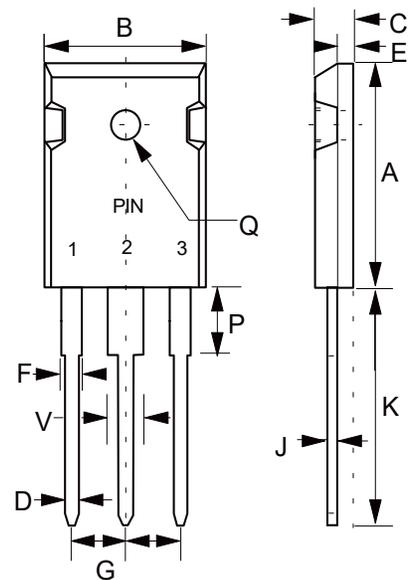
Note:1. High Temperature Solder Exemptions Applied, See EU Directive Annex 7a.

Internal Structure



**6\$ Amp
Super Fast
Recovery Rectifier
4\$\$ 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

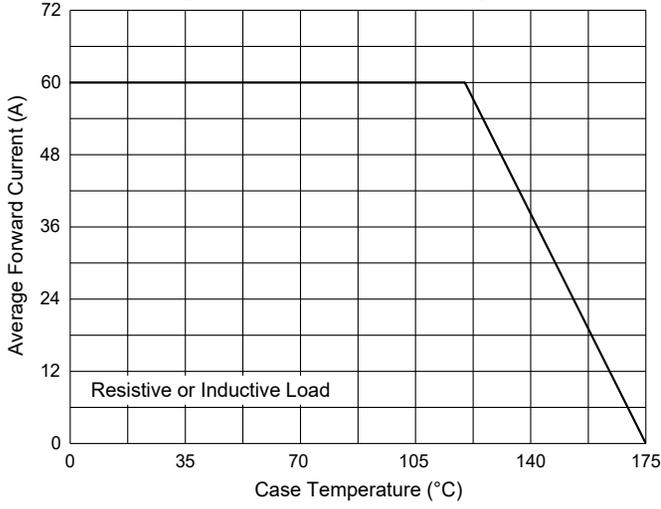


Fig. 2 - Typical Instantaneous Forward Characteristics

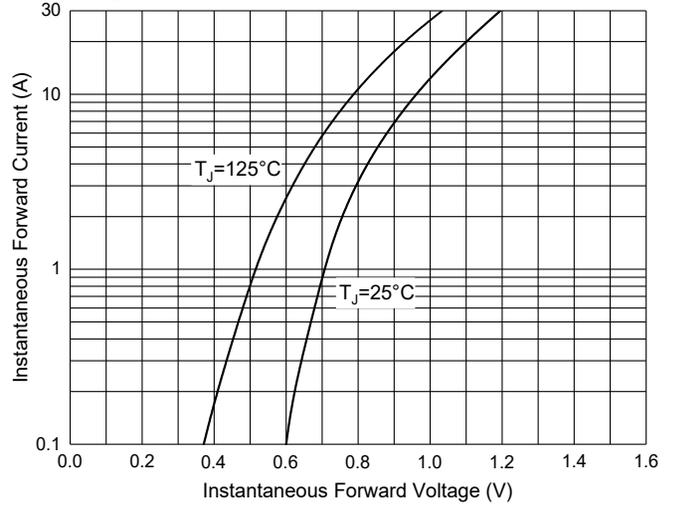
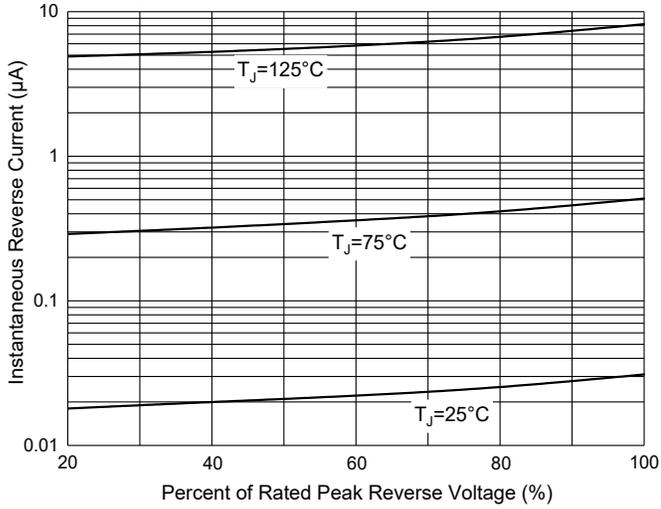


Fig. 3 - Typical Reverse Leakage Characteristics



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

IMPORTANT NOTICE

Micro Commercial Components Corp. reserves the right to make changes without further notice to any product herein to make corrections, modifications , enhancements , improvements , or other changes . **Micro Commercial Components Corp** . does not assume any liability arising out of the application or use of any product described herein; neither does it convey any license under its patent rights ,nor the rights of others . The user of products in such applications shall assume all risks of such use and will agree to hold **Micro Commercial Components Corp** . and all the companies whose products are represented on our website, harmless against all damages. **Micro Commercial Components Corp.** products are sold subject to the general terms and conditions of commercial sale, as published at <https://www.mccsemi.com/Home/TermsAndConditions>.

LIFE SUPPORT

MCC's products are not authorized for use as critical components in life support devices or systems without the express written approval of Micro Commercial Components Corporation.

CUSTOMER AWARENESS

Counterfeiting of semiconductor parts is a growing problem in the industry. Micro Commercial Components (MCC) is taking strong measures to protect ourselves and our customers from the proliferation of counterfeit parts. MCC strongly encourages customers to purchase MCC parts either directly from MCC or from Authorized MCC Distributors who are listed by country on our web page cited below. Products customers buy either from MCC directly or from Authorized MCC Distributors are genuine parts, have full traceability, meet MCC's quality standards for handling and storage. **MCC will not provide any warranty coverage or other assistance for parts bought from Unauthorized Sources.** MCC is committed to combat this global problem and encourage our customers to do their part in stopping this practice by buying direct or from authorized distributors.