

### **Features**

- Super Fast Switching For High Efficiency.
- Low Reverse Leakage
- Lead Free Finish/Rohs Compliant (Note1) ("P"Suffix Designates Compliant. See Ordering Information)
- Epoxy Meets UL 94 V-0 Flammability Rating
- Halogen Free Available Upon Request By Adding Suffix "-HF"

# **Maximum Ratings**

- Operating Junction Temperature Range: -55°C to +175°C
- Storage Temperature Range: -55°C to +150°C
- Typical Thermal Resistance: 1.5°C/W Junction to Case

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum	Maximum DC Blocking Voltage
MUR1560H	MUR1560H	600V	420V	600V

# Electrical Characteristics @ 25°C Unless Otherwise Specified

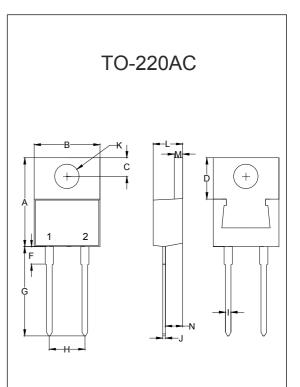
Average Forward Current (Rated VR-20Khz Square Wave) - 50% Duty Cycle	I <sub>F(AV)</sub>	15A	T <sub>C</sub> =125ºC
Peak Forward Surge Current	I <sub>FSM</sub>	180A	8.3ms,Half Sine Wave
Maximum Instantaneous Forward Voltage	V <sub>F</sub>	0.99V(Typ) 0.90V(Max) 1.23V(Typ) 1.15V(Max) 1.55V(Typ) 1.65V(Max) 1.40V(Max)	I <sub>F</sub> =5A; T <sub>J</sub> =25°C I <sub>F</sub> =5A; T <sub>J</sub> =125°C I <sub>F</sub> =15A; T <sub>J</sub> =25°C
Maximum Reverse Current At Rated DC Blocking Voltage	Reverse Current At Rated DC Blocking		T <sub>J</sub> =25°C T <sub>J</sub> =125°C
Maximum Reverse Recovery Time	T <sub>RR</sub>	35ns	I <sub>F</sub> =0.5A; I <sub>R</sub> =1.0A; I <sub>REC</sub> =0.25A

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

### Internal Structure



# 15 Amp Super Fast Recovery Rectifier 600 Volts



DIMENSIONS						
DIM	INCHES		MM		NOTE	
DIIVI	MIN	MAX	MIN	MAX	NOTE	
Α	0.560	0.625	14.22	15.88		
В	0.380	0.420	9.65	10.67		
С	0.100	0.135	2.54	3.43		
D	0.230	0.270	5.84	6.86		
F		0.250		6.35		
G	0.500	0.580	12.70	14.73		
Н	0.190	0.210	4.83	5.33		
I	0.020	0.045	0.51	1.14		
J	0.012	0.025	0.30	0.64		
K	0.139	0.161	3.53	4.09	Ф	
L	0.140	0.190	3.56	4.83		
M	0.045	0.055	1.14	1.40		
N	0.080	0.115	2.03	2.92		



# **Curve Characteristics**

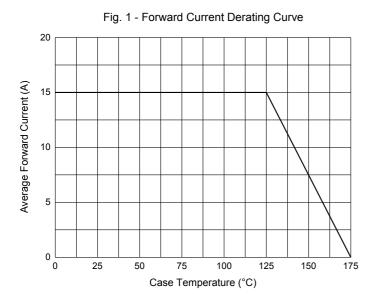


Fig. 3 - Reverse Leakage Characteristics

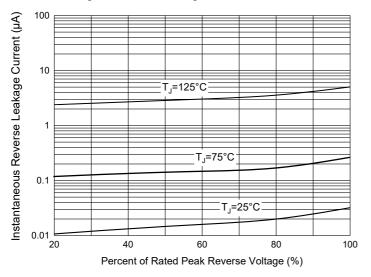


Fig. 2 - Instantaneous Forward Characteristics 15.0 13.5 Instantaneous Forward Current (A) T<sub>J</sub>=125°C 12.0 10.5 9.0 7.5 6.0 4.5 3.0 T<sub>J</sub>=25°C 1.5 0.0 0.2 0.4 2.2 0.6 8.0 1.0 1.2 1.4 1.8 2.0 Instantaneous Forward Voltage (V)



### **Ordering Information**

Device	Packing	
Part Number-BP	Bulk:50pcs/Tube,1Kpcs/Box,5Kpcs/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.