

#### **Features**

- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix Designates Compliant. See Ordering Information)
- Epoxy Meets UL 94 V-0 Flammability Rating
- Halogen Free Available Upon Request By Adding Suffix "-HF"

# 10 Amp Super Fast Rectifier 200 to 600 Volts

## **Maximum Ratings**

- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Typical Thermal Resistance: 2.5°C/W Junction to Case

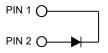
MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MUR1020F	MUR1020F	200V	140V	200V
MUR1040F	MUR1040F	400V	280V	400V
MUR1060F	MUR1060F	600V	420V	600V

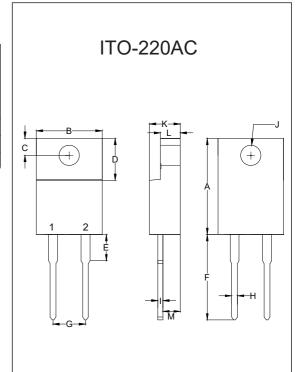
## Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	I <sub>F(AV)</sub>	10A	T <sub>C</sub> =100°C		
Peak Forward Surge Current	I <sub>FSM</sub>	125A	8.3ms,Half Sine		
Maximum Instantaneous Forward Voltage MUR1020F MUR1040F MUR1060F	V <sub>F</sub>	1.15V 1.5V 1.6V	I <sub>F</sub> =10A T <sub>J</sub> =25°C		
Maximum DC Reverse Current At Rated DC Blocking Voltage	I <sub>R</sub>	5.0μA 500μA	T <sub>J</sub> =25°C; T <sub>J</sub> =125°C		
Maximum Reverse Recovery Time MUR1020F MUR1040F-MUR1060F	t <sub>rr</sub>	35ns 50ns	I <sub>F</sub> =0.5A; I <sub>R</sub> =1.0A; I <sub>REC</sub> =0.25A		

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

### Internal Structure





DIMENSIONS						
DIM	INCHES		MM		NOTE	
DIIVI	MIN	MAX	MIN	MAX	NOTE	
Α	0.567	0.606	14.40	15.40		
В		0.406		10.30		
С	0.100	0.112	2.55	2.85		
D	0.248	0.272	6.30	6.90		
E		0.161		4.10		
F	0.500	0.543	12.70	13.80		
G	G 0.200		5.10			
Η		0.035		0.90		
I		0.032		0.80		
J	0.102	0.134	2.60	3.40	Ф	
K		0.189		4.80		
L		0.123		3.10		
М	0.098	0.114	2.50	2.90		



## **Curve Characteristics**

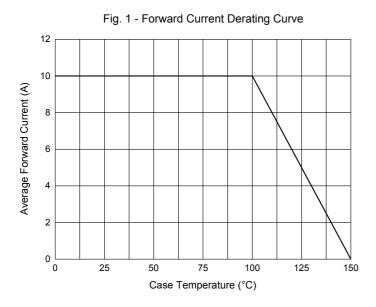
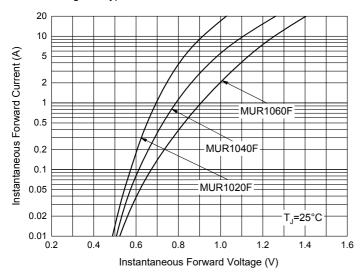


Fig. 3 - Typical Instantaneous Forward Characteristics



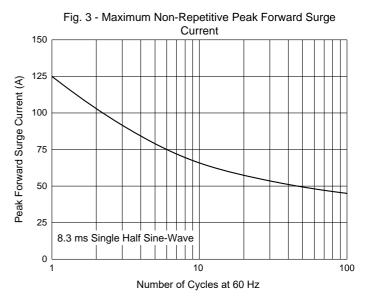
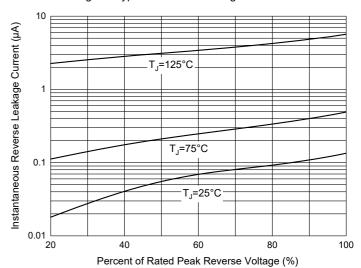


Fig. 4 - Typical Reverse Leakage Characteristics





# **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

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