

### **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

# 30 Amp Ultra Fast Recovery Rectifier 600 Volts

# **Maximum Ratings**

• Operating Junction Temperature Range: -55°C to +175°C

• Storage Temperature Range: -55°C to +175°C

• Maximum Thermal Resistance: 3°C/W Junction to Case

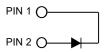
MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MURS3060F	MURS3060F	600V	420V	600V

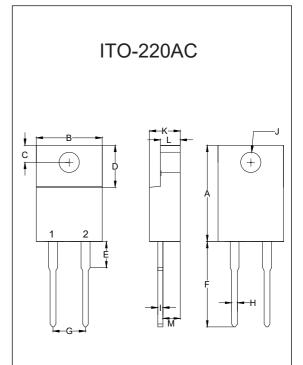
### Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Rectified Forward Current	I <sub>F(AV)</sub>	30A	T <sub>C</sub> =25°C
Peak Forward Surge Current	I <sub>FSM</sub>	200A	8.3ms,Half Sine
Instantaneous Forward Voltage	V <sub>F</sub>	2.0V(Max.) 1.6V(Typ.)	I <sub>F</sub> =30A; T <sub>J</sub> =25°C I <sub>F</sub> =30A; T <sub>J</sub> =25°C
Maximum Reverse Current At Rated DC Blocking Voltage	I <sub>R</sub>	5μΑ 200μΑ	T <sub>J</sub> =25°C; T <sub>J</sub> =125°C
Typical Junction Capacitance	CJ	200pF	Measured at 1.0MHz, V <sub>R</sub> =4V
Reverse Recovery Time	t <sub>rr</sub>	35ns(Typ.) 45ns(Max.)	I <sub>F</sub> =0.5A; I <sub>R</sub> =1.0A; I <sub>RR</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			
Н		0.035		0.90		
ı		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**

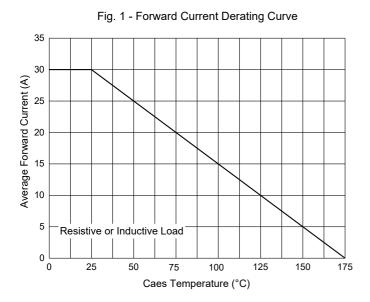


Fig. 3 - Typical Instantaneous Forward Characteristics

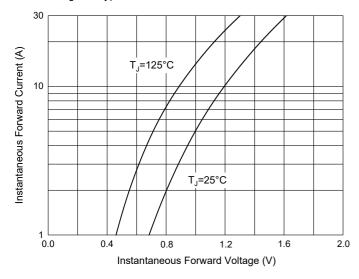


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge
Current

280

240

240

240

200

160

80

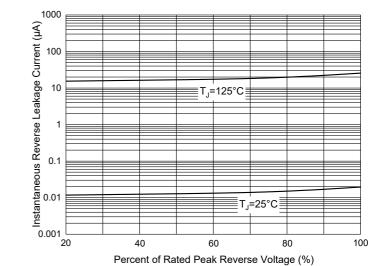
40

8.3 ms Single Half Sine-Wave

0

Number of Cycles at 60 Hz

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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