

# **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

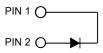
MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MURS3060F	MURS3060F	600V	420V	600V

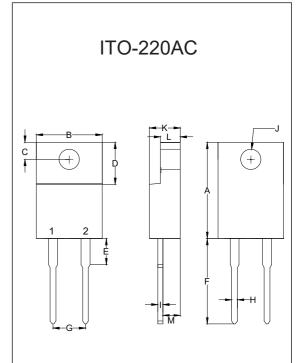
# Electrical Characteristics @ 25°C Unless Otherwise Specified

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
	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	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**

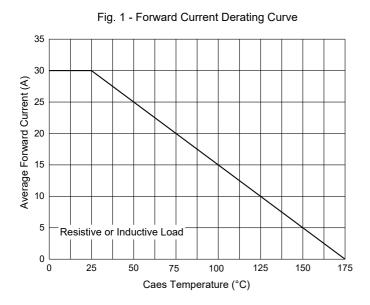


Fig. 3 - Typical Instantaneous Forward Characteristics 30

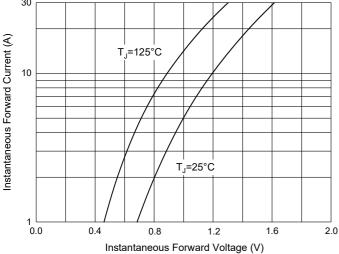
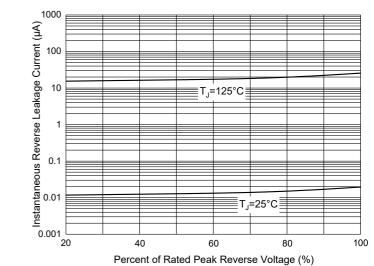


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current 280 240 Peak Forward Surge Current (A) 200 160 120 80 8.3 ms Single Half Sine-Wave 10 100 Number of Cycles at 60 Hz

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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