

#### **Features**

- Halogen Free Available Upon Request By Adding Suffix "-HF"
- Lead Free Finish/RoHS Compliant (Note1) ("P"Suffix Designates Compliant. See Ordering Information)
- Epoxy Meets UL 94 V-0 Flammability Rating
- Low Switching Losses and High Efficiency
- Low Reverse Leakage
- Ultrafast Recovery Time
- Planar Structure Die and Soft Recovery Characteristics

## **Maximum Ratings**

- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Typical Thermal Resistance: 4°C/W Junction to Case

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	DMC	Maximum DC Blocking Voltage
MURS1040FA	MURS1040FA	400V	280V	400V

## Electrical Characteristics @ 25°C Unless Otherwise Specified

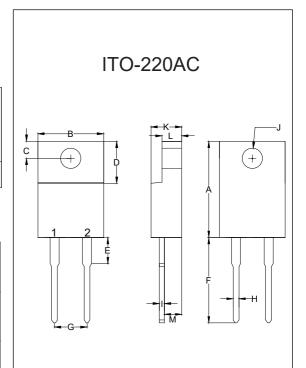
Average Rectified Forward Current	I <sub>F(AV)</sub>	10A	T <sub>C</sub> = 100°C
Peak Forward Surge Current	I <sub>FSM</sub>	120A	8.3ms,Half Sine
Instantaneous Forward Voltage	V <sub>F</sub>	1.10V(Typ) 1.25V(Max) 1.05V(Max)	I <sub>F</sub> =10A;T <sub>J</sub> =25°C I <sub>F</sub> =10A;T <sub>J</sub> =25°C I <sub>F</sub> =10A;T <sub>J</sub> =125°C
Maximum Reverse Current At Rated DC Blocking Voltage	I <sub>R</sub>	5μΑ 50μΑ	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>RR</sub> =0.25A
Typical Junction Capacitance	СЈ	50pF	Measured at 1.0MHz, V <sub>R</sub> =4.0V

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

### Internal Structure



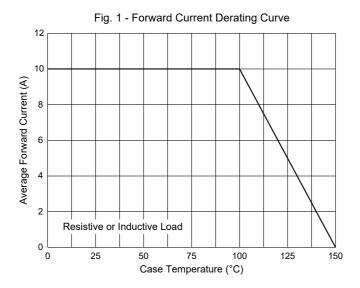
# 10 Amp FRED Rectifiers 400 Volts

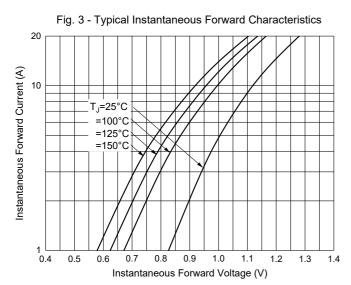


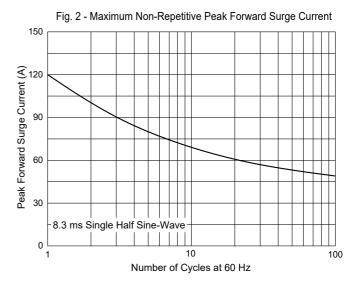
DIMENSIONS						
DIM	INCHES		MM		NOTE	
DIIVI	MIN	MAX	MIN	MAX	NOTE	
Α	0.567	0.606	14.40	15.40		
В		0.406		10.30		
С	0.100	0.112	2.55	2.85		
D	0.248	0.272	6.30	6.90		
E		0.161		4.10		
F	0.500	0.543	12.70	13.80		
G 0.200		00	5.10			
Н		0.035		0.90		
I		0.032		0.80		
J	0.102	0.134	2.60	3.40	Ф	
K		0.189		4.80		
L		0.123		3.10		
М	0.098	0.114	2.50	2.90		

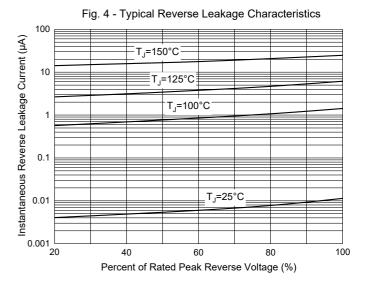


### **Curve Characteristics**











## **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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