

#### **Features**

- Halogen Free Available Upon Request By Adding Suffix "-HF"
- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 1
- · High Reliability
- High Surge Current Capability
- Mounting Torque: 5 in-lbs Maximum
- Lead Free Finish/RoHS Compliant(Note 1)("P" Suffix Designates Compliant. See Ordering Information)

# **Maximum Ratings**

- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Typical Thermal Resistance: 3.0 °C/W Junction to Case

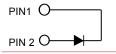
MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
FRA801GF	FRA801GF	50V	35V	50V
FRA802GF	FRA802GF	100V	70V	100V
FRA803GF	FRA803GF	200V	140V	200V
FRA804GF	FRA804GF	400V	280V	400V
FRA805GF	FRA805GF	600V	420V	600V
FRA806GF	FRA806GF	V008	560V	800V
FRA807GF	FRA807GF	1000V	700V	1000V

## Electrical Characteristics @ 25°C Unless Otherwise Specified

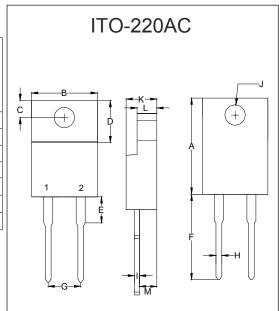
Average Forward Current	I <sub>F(AV)</sub>	8.0A	T <sub>c</sub> =100°C
Peak Forward Surge Current	I <sub>FSM</sub>	150A	8.3ms,Half Sine
Maximum Instantaneous Forward Voltage	V <sub>F</sub>	1.30V	I <sub>FM</sub> =8.0A;
Maximum DC Reverse Current At Rated DC Blocking Voltage	I <sub>R</sub>	5.0μA 100μA	T <sub>J</sub> =25°C; T <sub>J</sub> =125°C
Maximum Reverse Recovery Time FRA801GF~804GF FRA805GF FRA806GF~807GF	t <sub>rr</sub>	150ns 250ns 500ns	I <sub>F</sub> =0.5A; I <sub>R</sub> =1.0A; Irr=0.25A
Typical Junction Capacitance	CJ	60pF	Measured at 1.0MHz V <sub>R</sub> =4.0V

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

## **Internal Structure**



# 8.0 Amp Fast Recovery Rectifier 50 to 1000 Volts



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	
Е		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**

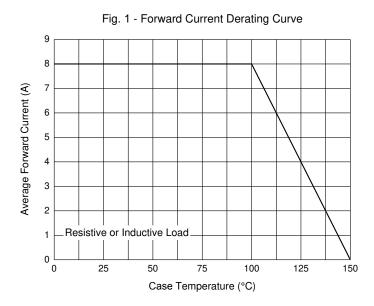
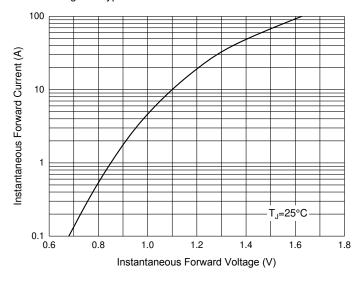


Fig. 3 - Typical Instantaneous Forward Characteristics



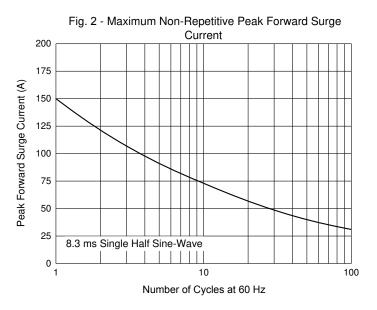
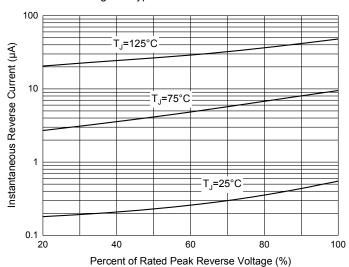


Fig. 4 - Typical Reverse Characteristics





# **Ordering Information**

Device	Packing
Part Number-BP	Bulk;1Kpcs/Box

Note: Adding "-HF" Suffix For Halogen Free, eg. Part Number-TP-HF

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