Micro Commercial Components

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20736 Marilla Street Chatsworth
CA 91311
Phone:(818) 701-4933
Fax: (818) 701-4939

FRA801GF THRU FRA807GF

8 Amp Glass Passivated Fast Recovery Rectifier 50 to 1000 Volts

Features

- Lead Free Finish/Rohs Compliant (Note1) ("P"Suffix designates Compliant. See ordering information)
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- High Reliability
- Halogen free available upon request by adding suffix "-HF"
- High Surge Current Capability

Maximum Ratings

- Mounting Torgue: 5 in-lbs Maximum
- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C
- Typical Thermal Resistance: 3.0 °C/W junction to case

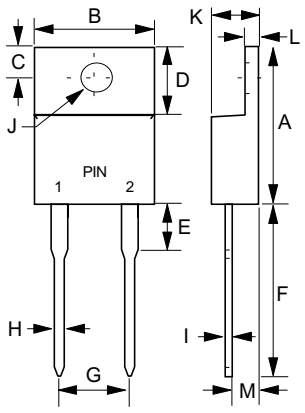
MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
FRA801GF	FRA801GF	50V	35V	50V
FRA802GF	FRA802GF	100V	70V	100V
FRA803GF	FRA803GF	200V	140V	200V
FRA804GF	FRA804GF	400V	280V	400V
FRA805GF	FRA805GF	600V	420V	600V
FRA806GF	FRA806GF	800V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

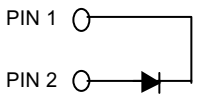
Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	8 A	T_C = 100°C
Peak Forward Surge Current	I_{FSM}	150A	8.3ms, half sine
Maximum Instantaneous Forward Voltage	V_F	1.3V	I_{FM} = 8.0A
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	5.0μA 100μA	T_A = 25°C T_A = 125°C
Maximum Reverse Recovery Time FRA801GF-804GF FRA805GF FRA806GF-807GF	T_{rr}	 150ns 250ns 500ns	 I_F=0.5A, I_R=1.0A, I_{RR}=0.25A
Typical Junction Capacitance	C_J	60pF	Measured at 1.0MHz, V_R=4.0V

Notes: 1. High Temperature Solder Exemption Applied, see EU Directive Annex 7.

ITO-220AC





DIMENSIONS					
	INCHES		MM		
DIM	MIN	MAX	MIN	MAX	
A	.583	.606	14.80	15.40	
B	---	.406	---	10.30	
C	.100	.112	2.55	2.85	
D	.248	.272	6.30	6.90	
E	---	.161	---	4.10	
F	.512	.543	13.00	13.80	
G	.200		5.10		
H	---	.035	---	0.90	
I	---	.032	---	0.80	
J	.118	.134	3.00	3.40	∅
K	---	.189	---	4.80	
L	---	.123	---	3.10	
M	.098	.114	2.50	2.90	

FRA801GF thru FRA807GF

FIG.1- REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM

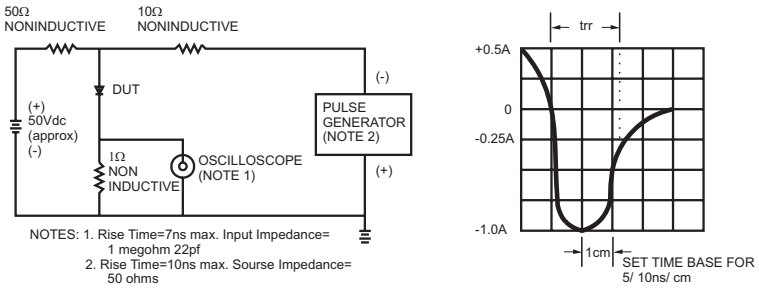


FIG.2- MAXIMUM FORWARD CURRENT DERATING CURVE

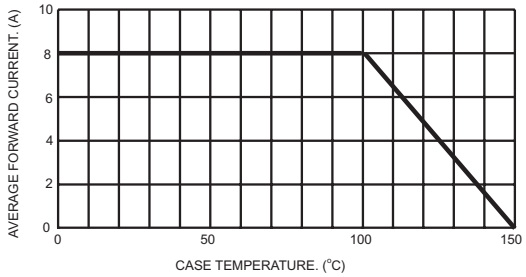


FIG.3- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

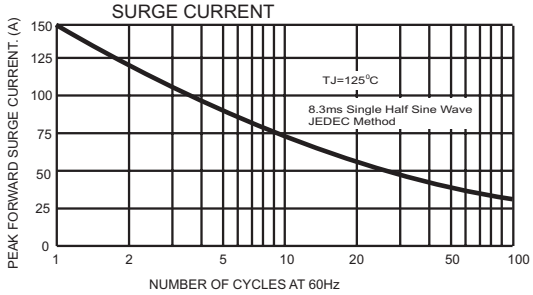


FIG.4- TYPICAL JUNCTION CAPACITANCE

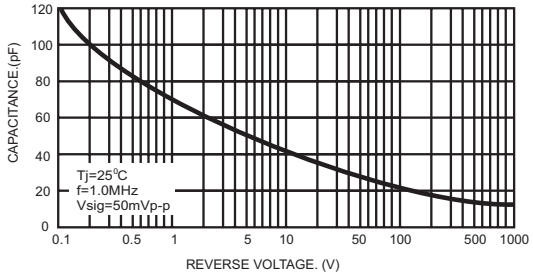


FIG.5- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

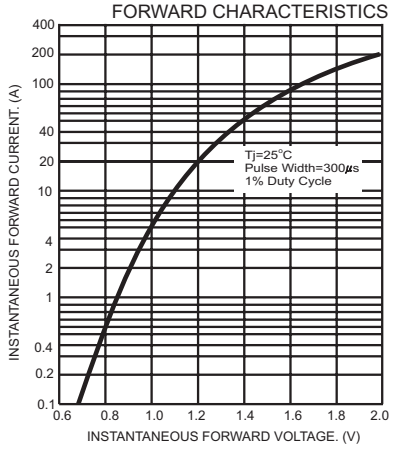
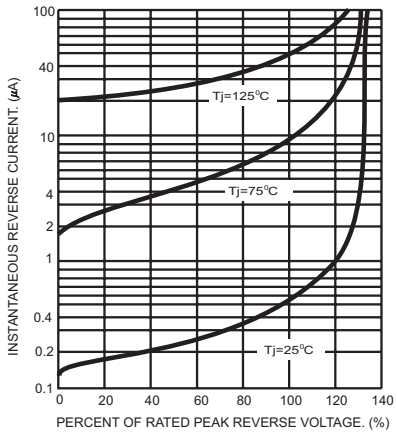


FIG.6- TYPICAL REVERSE CHARACTERISTICS



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Ordering Information

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

Note : Adding "-HF" suffix for halogen free, eg. Part Number-BP-HF

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