

Features

- Halogen Free Available Upon Request By Adding Suffix "-HF"
- Glass Passivated Junction
- Low Leakage Current And Fast Switching
- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 1
- 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: 60 °C/W Junction to Ambient
- Typical Thermal Resistance: 25 °C/W Junction to Lead

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
FR101GP	FR101GP	50V	35V	50V
FR102GP	FR102GP	100V	70V	100V
FR103GP	FR103GP	200V	140V	200V
FR104GP	FR104GP	400V	280V	400V
FR105GP	FR105GP	600V	420V	600V
FR106GP	FR106GP	800V	560V	800V
FR107GP	FR107GP	1000V	700V	1000V

Electrical Characteristics @ 25°C Unless Otherwise Specified

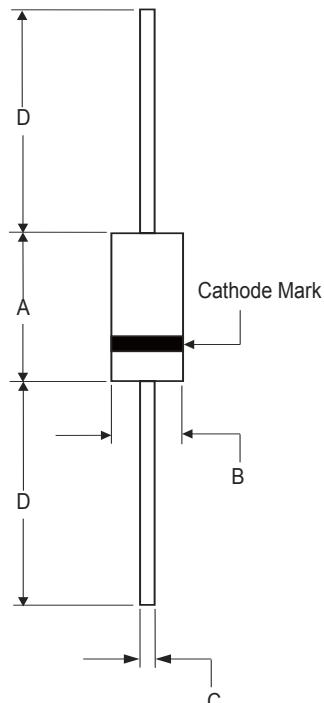
Average Forward Current	$I_{F(AV)}$	1.0A	See Fig.1
Peak Forward Surge Current	I_{FSM}	30A	8.3ms, Half Sine
Maximum Instantaneous Forward Voltage	V_F	1.30V	$I_{FM}=1.0A$; $T_J=25^\circ C$ *
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	5.0 μ A 100 μ A	$T_J=25^\circ C$; $T_J=100^\circ C$
Maximum Reverse Recovery Time	t_{rr}	150ns 250ns 500ns	$I_F=0.5A$; $I_R=1.0A$; $I_{rr}=0.25A$
Typical Junction Capacitance	C_J	15pF	Measured at 1.0MHz $V_R=4.0V$

*Pulse Test: Pulse Width 300 μ sec, Duty Cycle 1%

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

1.0 Amp Fast Recovery Rectifier 50 to 1000 Volts

DO-41



DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	0.160	0.205	4.10	5.20	
B	0.080	0.107	2.00	2.70	Φ
C	0.028	0.035	0.71	0.90	Φ
D	1.000	----	25.40	----	

Curve Characteristics

Fig. 1 - Forward Current Derating Curve

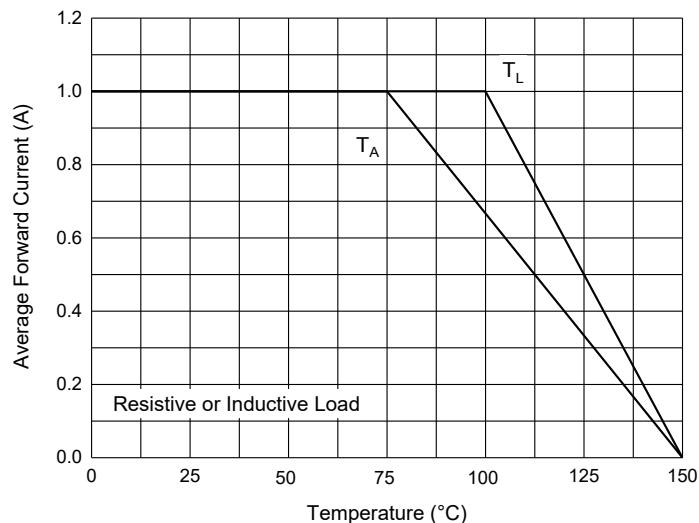


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

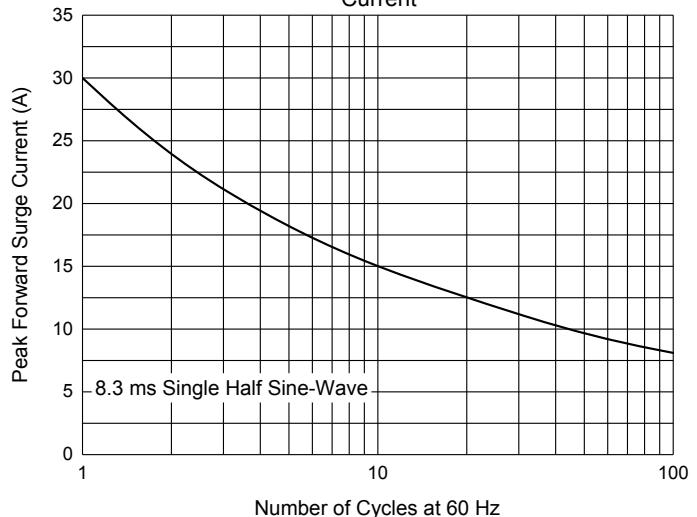


Fig. 3 - Typical Instantaneous Forward Characteristics

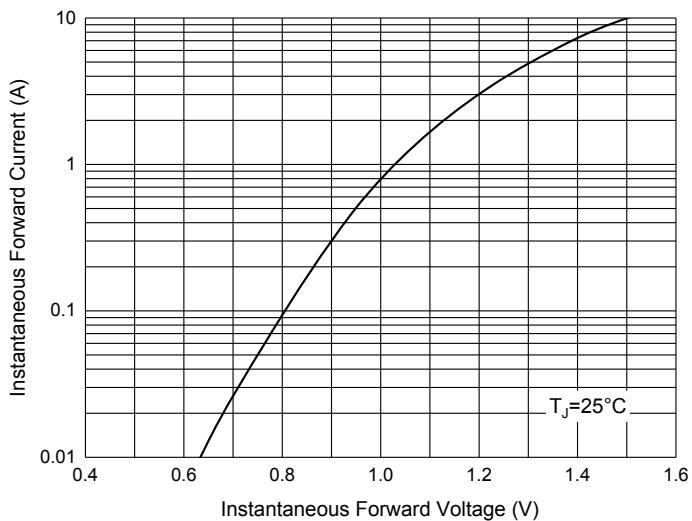
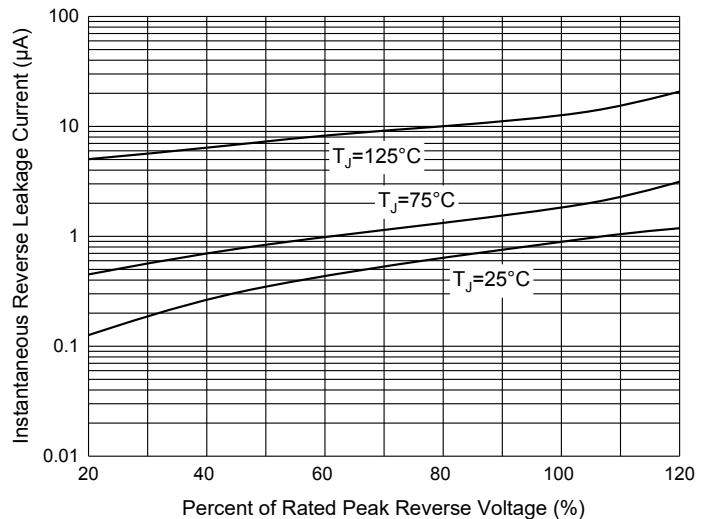


Fig. 4 - Typical Reverse Leakage Characteristics



Ordering Information

Device	Packing
(Part Number)-TP	Tape&Reel: 5Kpcs/Reel
(Part Number)-AP	Ammo Packing: 5Kpcs/Ammo Box
(Part Number)-BP	Bulk:1Kpcs/Box,50Kpcs/Carton

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

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