

## Features

- Halogen Free Available Upon Request By Adding Suffix "-HF"
- Epoxy Meets UL 94 V-0 Flammability Rating
- Glass Passivated Junction
- Fast Switching Speed For High Efficiency
- 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: 50 °C/W Junction to Ambient

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
FR151GP	FR151GP	50V	35V	50V
FR152GP	FR152GP	100V	70V	100V
FR153GP	FR153GP	200V	140V	200V
FR154GP	FR154GP	400V	280V	400V
FR155GP	FR155GP	600V	420V	600V
FR156GP	FR156GP	800V	560V	800V
FR157GP	FR157GP	1000V	700V	1000V

## Electrical Characteristics @ 25°C Unless Otherwise Specified

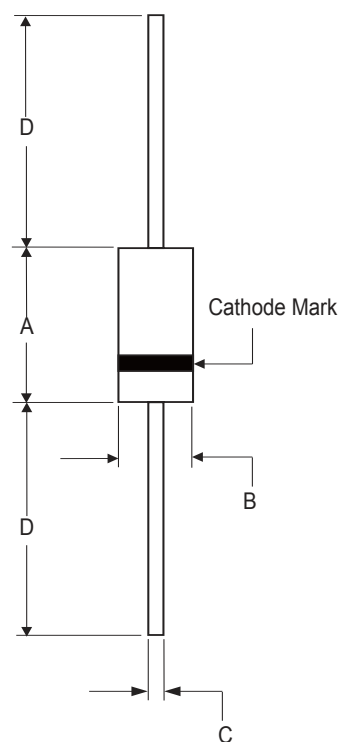
Average Forward Current	$I_{F(AV)}$	1.5A	$T_A=55\text{ }^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	50A	8.3ms, Half Sine
Maximum Instantaneous Forward Voltage	$V_F$	1.30V	$I_{FM}=1.5A$ ; $T_J=25^\circ\text{C}^*$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	5.0 $\mu\text{A}$ 100 $\mu\text{A}$	$T_J=25^\circ\text{C}$ ; $T_J=100^\circ\text{C}$
Maximum Reverse Recovery Time FR151GP~154GP FR155GP FR156GP~157GP	$t_{rr}$	150ns 250ns 500ns	$I_F=0.5A$ ; $I_R=1.0A$ ; $I_{rr}=0.25A$
Typical Junction Capacitance	$C_J$	20pF	Measured at 1.0MHz $V_R=4.0V$

\*Pulse Test: Pulse Width 300msec, Duty Cycle 1%

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

# 1.5 Amp Fast Recovery Rectifier 50 to 1000 Volts

## DO-15



DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	0.230	0.300	5.80	7.60	
B	0.104	0.140	2.60	3.60	
C	0.026	0.035	0.70	0.90	
D	1.000	-----	25.40	-----	

**Curve Characteristics**

Fig. 1 - Forward Current Derating Curve

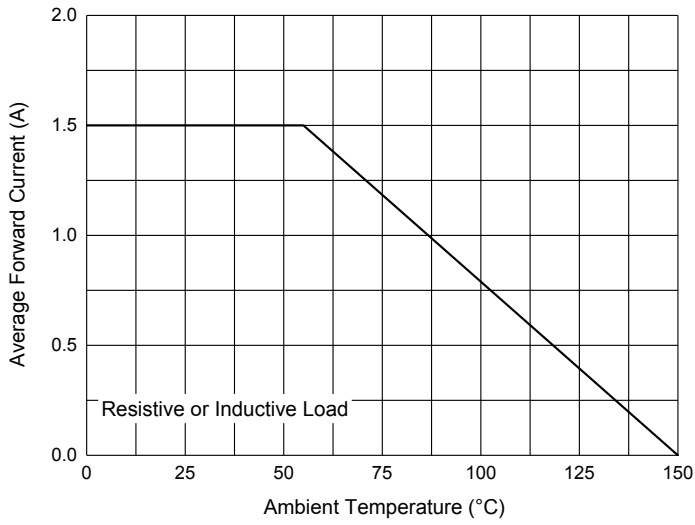


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

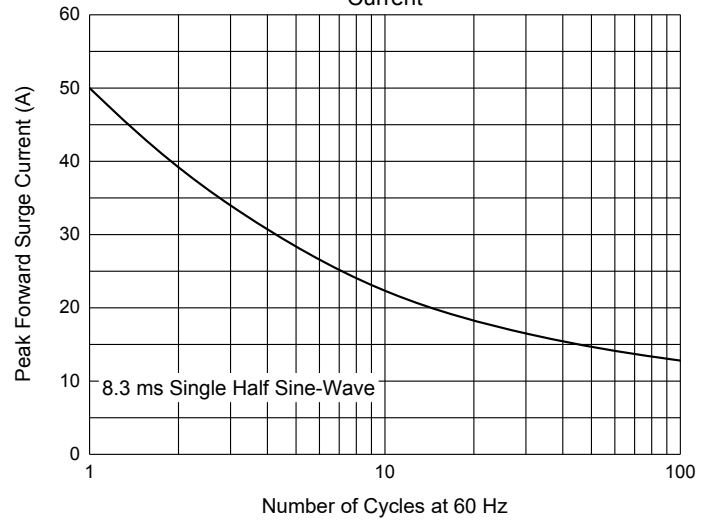


Fig. 3 - Typical Instantaneous Forward Characteristics

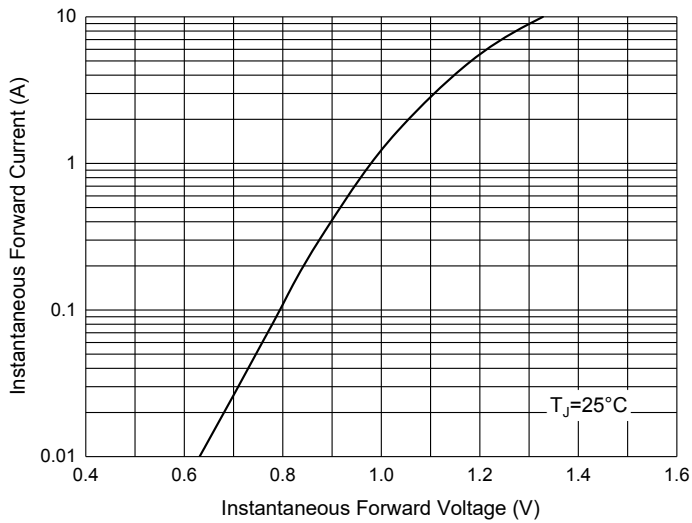
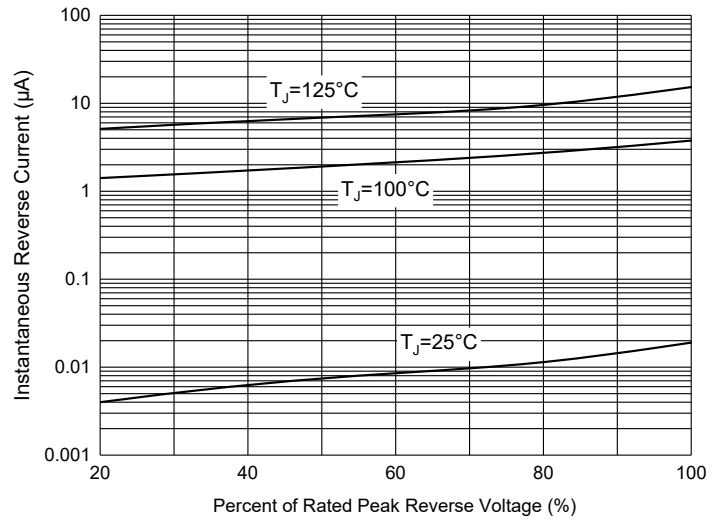


Fig. 4 - Typical Reverse Characteristics



## Ordering Information

Device	Packing
(Part Number)-TP	Tape&Reel: 4Kpcs/Reel
(Part Number)-AP	Ammo Packing: 3Kpcs/Ammo Box
(Part Number)-BP	Bulk:500pcs/Box,25Kpcs/Carlot

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

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