Features

- Glass Passivated Junction
- Low Current Leakage And Low Cost
- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 1
- Halogen Free Available Upon Request By Adding Suffix "-HF"
- Lead Free Finish/RoHS Compliant (Note1) ("P"Suffix Designates Compliant. See Ordering Information)

1 Amp Glass Passivated Rectifier 50 - 1000 Volts

Maximum Ratings

- Operating Junction Temperature Range: -55°C to +175°C
- Storage Temperature Range: -55°C to +175°C
- Maximum Thermal Resistance: 20°C/W Junction to Lead

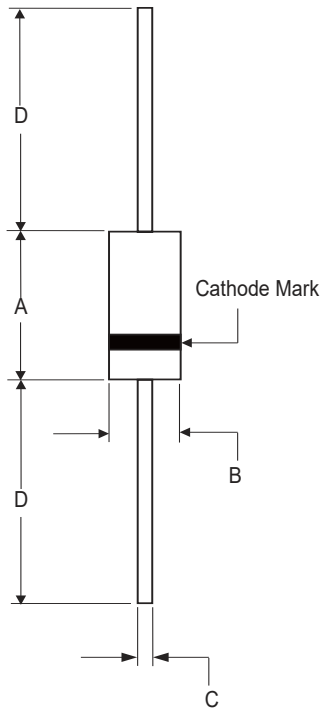
MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
1N4001GP	1N4001GP	50V	35V	50V
1N4002GP	1N4002GP	100V	70V	100V
1N4003GP	1N4003GP	200V	140V	200V
1N4004GP	1N4004GP	400V	280V	400V
1N4005GP	1N4005GP	600V	420V	600V
1N4006GP	1N4006GP	800V	560V	800V
1N4007GP	1N4007GP	1000V	700V	1000V

Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	1.0A	T_A=75ºC
Peak Forward Surge Current	I_{FSM}	30A	8.3ms,Half Sine
Maximum Instantaneous Forward Voltage	V_F	1.1V	I_{FM}=1.0A; T_J=25ºC(Note 2)
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	5.0µA 50µA	T_J=25ºC; T_J=125ºC
Typical Junction Capacitance	C_J	15pF	Measured at 1.0MHz V_R=4.0V
Typical Reverse Recovery Time	t_{rr}	2.0µs	I_F=0.5A; I_R=1.0A; Irr=0.25A

Note: 1. High Temperature Solder Exemption Applied,See EU Directive Annex 7a.
2. Pulse Test: Puls Width 300 usec, Duty Cycle 2%

DO-41



DIMENSIONS					
DIM	INCHES		MM		NOTE
	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 - Typical Instantaneous Forward Characteristics

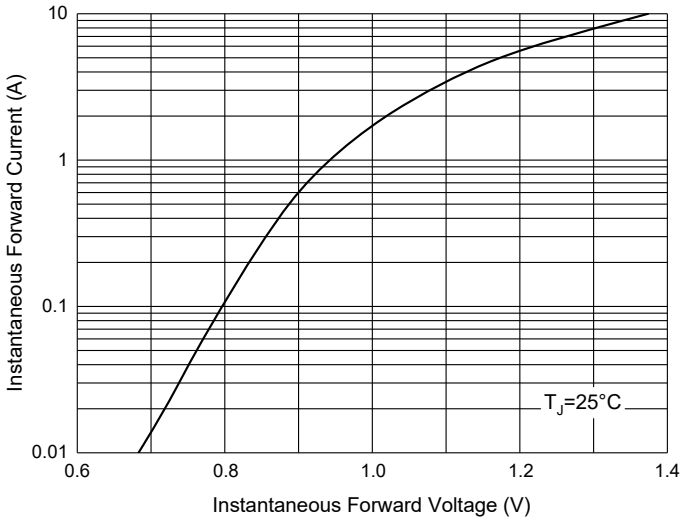


Fig. 2 - Typical Reverse Leakage Characteristics

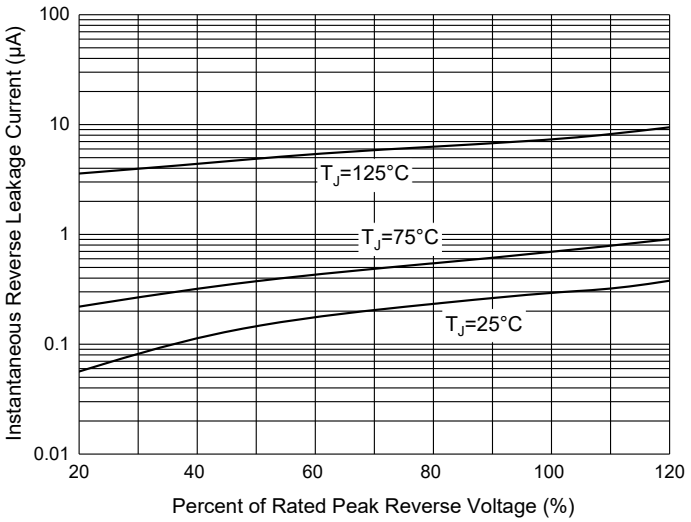


Fig. 3 - Forward Current Derating Curve

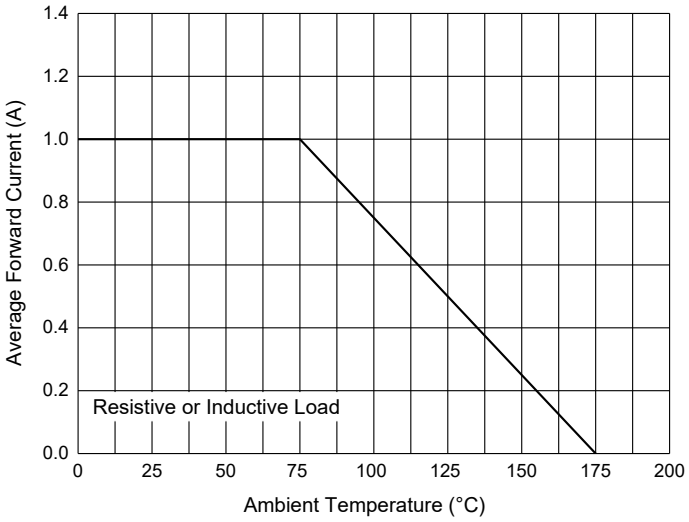
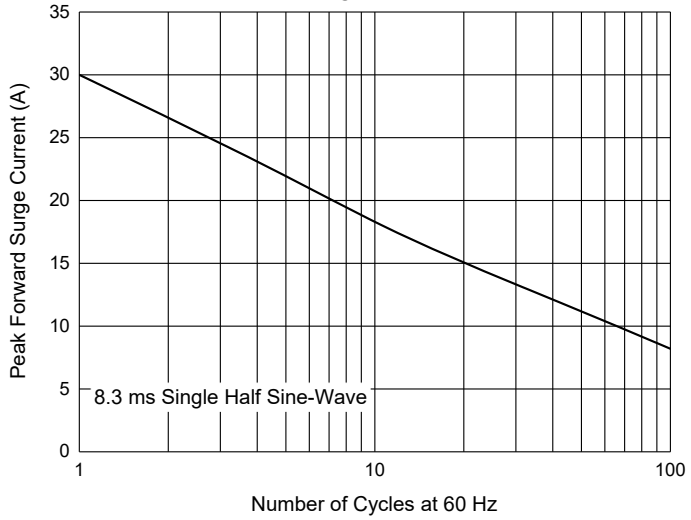


Fig. 4 - Maximum Non-Repetitive Peak Forward Surge Current



Ordering Information

Device	Packing
Part Number-TP	Tape&Reel:5Kpcs/Reel
Part Number-AP	Ammo Packing:5Kpcs/AmmoBox
Part Number-BP	Bulk: 50Kpcs/Carton

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

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