Features

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

Maximum Ratings

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

1 Amp Glass Passivated Rectifier 50 - 1000 Volts

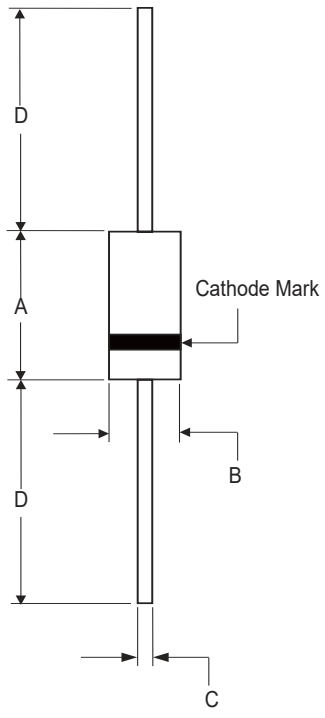
MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
1N4001GP	1N4001GP	50V	35V	50V
1N4002GP	1N4002GP	100V	70V	100V
1N4003GP	1N4003GP	200V	140V	200V
1N4004GP	1N4004GP	400V	280V	400V
1N4005GP	1N4005GP	600V	420V	600V
1N4006GP	1N4006GP	800V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

Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	1.0A	See Fig. 3
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

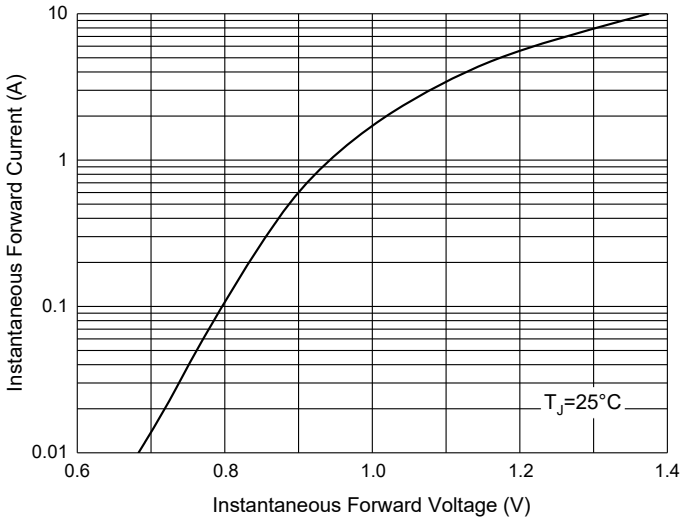


Fig. 2 - Typical Reverse Leakage Characteristics

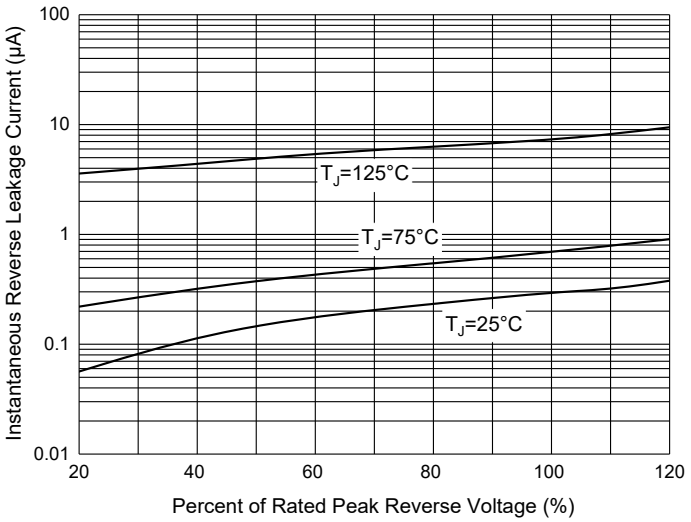


Fig. 3 - Forward Current Derating Curve

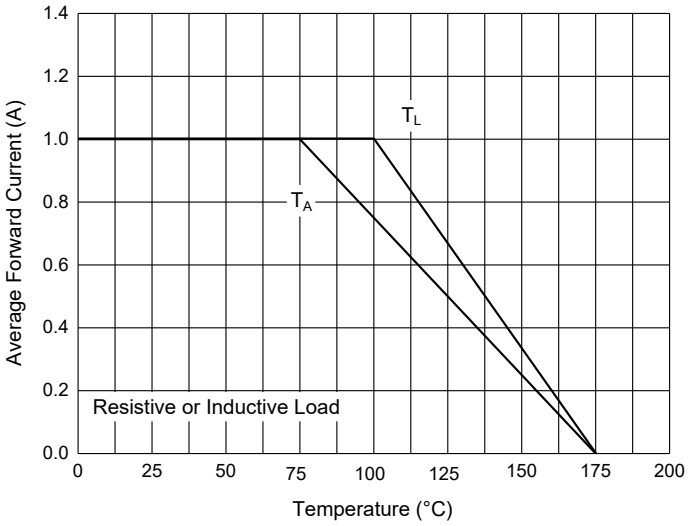
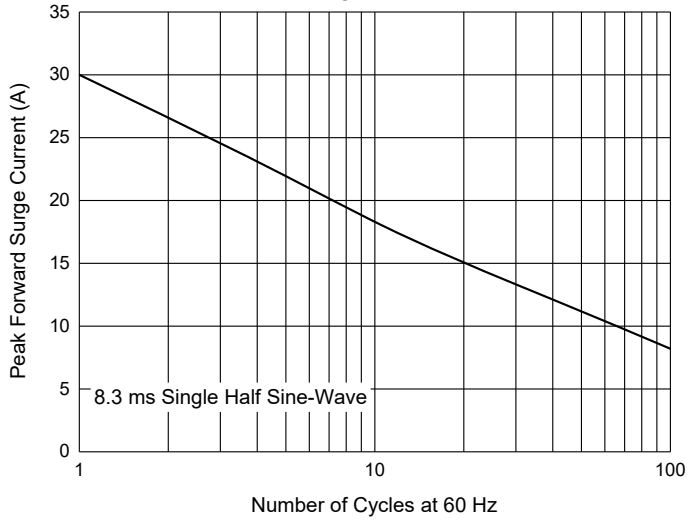


Fig. 4 - Maximum Non-Repetitive Peak Forward Surge Current



Ordering Information

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

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

*****IMPORTANT NOTICE*****

Micro Commercial Components Corp. reserves the right to make changes without further notice to any product herein to make corrections, modifications , enhancements , improvements , or other changes . ***Micro Commercial Components Corp*** . does not assume any liability arising out of the application or use of any product described herein; neither does it convey any license under its patent rights ,nor the rights of others . The user of products in such applications shall assume all risks of such use and will agree to hold ***Micro Commercial Components Corp*** . and all the companies whose products are represented on our website, harmless against all damages. ***Micro Commercial Components Corp***. products are sold subject to the general terms and conditions of commercial sale, as published at
https://www.mccsemi.com/Home/TermsAndConditions.

*****LIFE SUPPORT*****

MCC's products are not authorized for use as critical components in life support devices or systems without the express written approval of Micro Commercial Components Corporation.

*****CUSTOMER AWARENESS*****

Counterfeiting of semiconductor parts is a growing problem in the industry. Micro Commercial Components (MCC) is taking strong measures to protect ourselves and our customers from the proliferation of counterfeit parts. MCC strongly encourages customers to purchase MCC parts either directly from MCC or from Authorized MCC Distributors who are listed by country on our web page cited below. Products customers buy either from MCC directly or from Authorized MCC Distributors are genuine parts, have full traceability, meet MCC's quality standards for handling and storage. **MCC will not provide any warranty coverage or other assistance for parts bought from Unauthorized Sources**. MCC is committed to combat this global problem and encourage our customers to do their part in stopping this practice by buying direct or from authorized distributors.