

## 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
- Maximum 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
1N4942GP	1N4942GP	200V	140V	200V
1N4944GP	1N4944GP	400V	280V	400V
1N4946GP	1N4946GP	600V	420V	600V
1N4947GP	1N4947GP	800V	500V	800V
1N4948GP	1N4948GP	1000V	700V	1000V

## Electrical Characteristics @ 25°C Unless Otherwise Specified

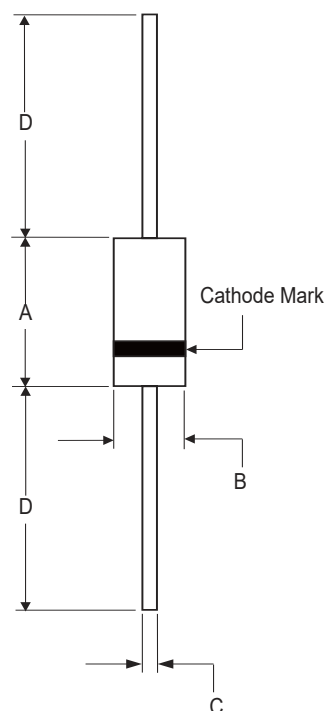
Average Forward Current	$I_{F(AV)}$	1.0A	$T_A=55\text{ }^{\circ}\text{C}$
Peak Forward Surge Current	$I_{FSM}$	25A	8.3ms, Half Sine
Maximum Instantaneous Forward Voltage	$V_F$	1.30V	$I_{FM}=1.0A$ ; $T_J=25^{\circ}\text{C}^*$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	5.0 $\mu\text{A}$ 200 $\mu\text{A}$	$T_J=25^{\circ}\text{C}$ ; $T_J=150^{\circ}\text{C}$
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  $\mu\text{sec}$ , Duty Cycle 2%

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

# 1.0 Amp Fast Recovery Rectifier 200 to 1000 Volts

## DO-41



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	$\Phi$
C	0.028	0.035	0.71	0.90	$\Phi$
D	1.000	-----	25.40	-----	

## Curve Characteristics

Fig. 1 - Forward Current Derating Curve

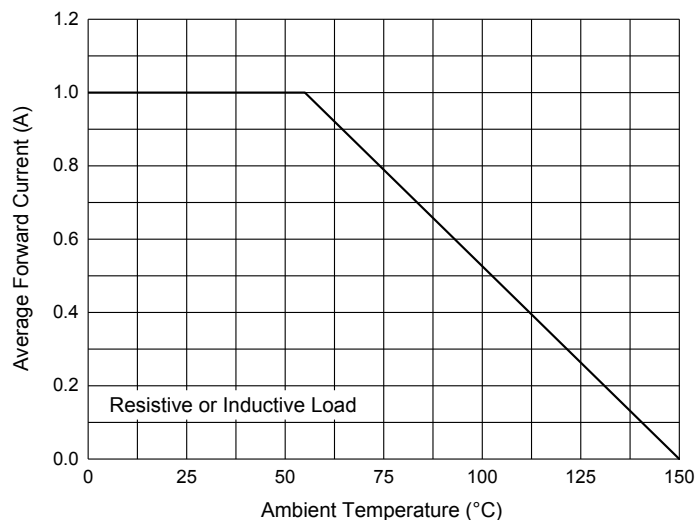


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

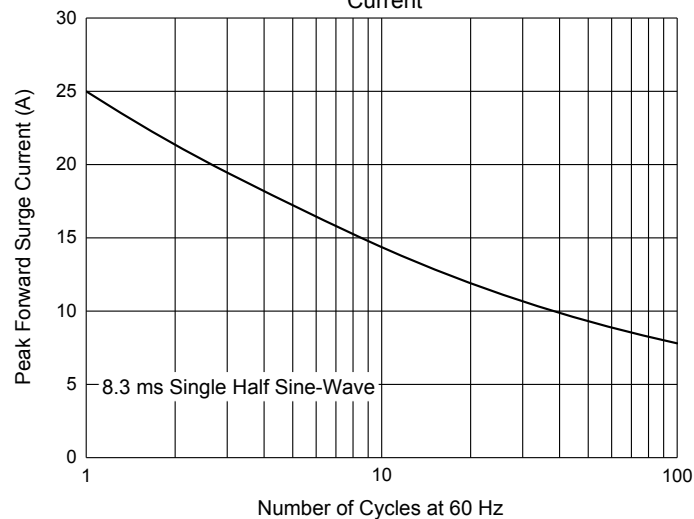


Fig. 3 - Typical Instantaneous Forward Characteristics

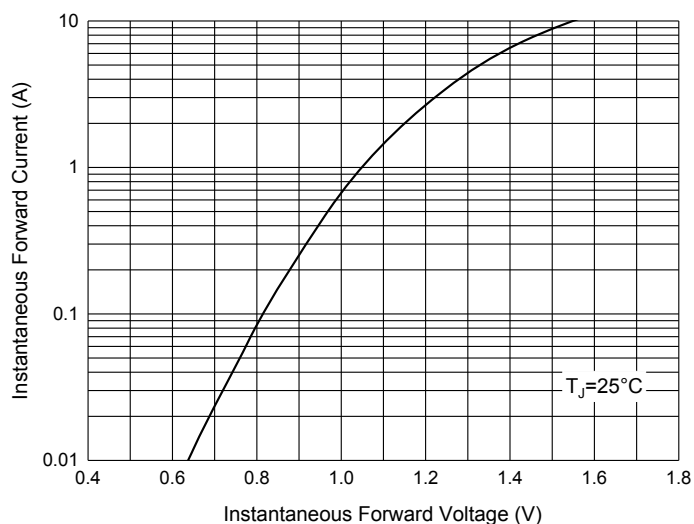
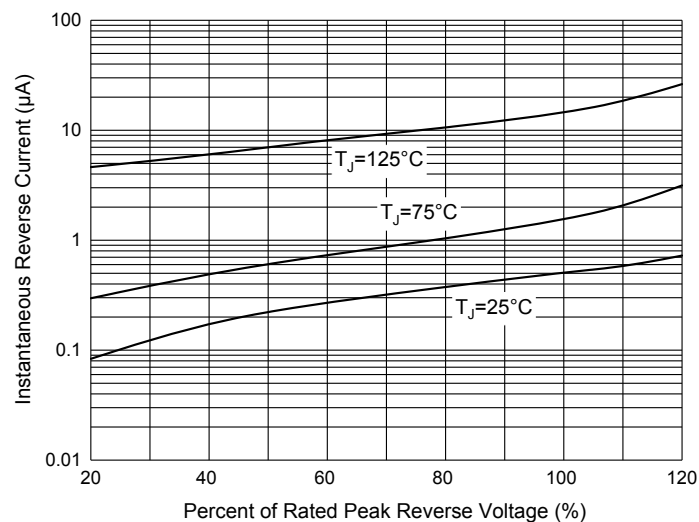


Fig. 4 - Typical Reverse Characteristics



## Ordering Information

Device	Packing
(Part Number)-TP	Tape&Reel: 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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