

### Features

- Halogen Free Available Upon Request By Adding Suffix "-HF"
- Ultra Fast Switching Speed For High Efficiency
- Low Leakage
- 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: 40°C/W Junction to Ambient

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
UF4001GP	UF4001GP	50V	35V	50V
UF4002GP	UF4002GP	100V	70V	100V
UF4003GP	UF4003GP	200V	140V	200V
UF4004GP	UF4004GP	400V	280V	400V
UF4005GP	UF4005GP	600V	420V	600V
UF4006GP	UF4006GP	800V	560V	800V
UF4007GP	UF4007GP	1000V	700V	1000V

### Electrical Characteristics @ 25°C Unless Otherwise Specified

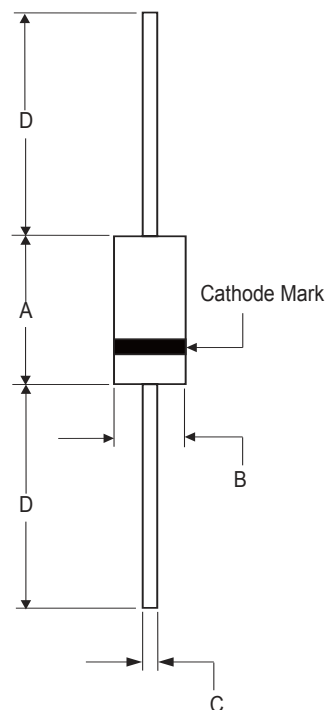
Average Forward Current	$I_{F(AV)}$	1.0A	$T_A=55^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	30A	8.3ms, Half Sine
Maximum Instantaneous Forward Voltage	$V_F$	1.0V 1.3V 1.7V	$I_{FM}=1.0A$ ; $T_J=25^\circ\text{C}^*$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	5.0 $\mu\text{A}$ 100 $\mu\text{A}$	$T_J=25^\circ\text{C}$ ; $T_J=100^\circ\text{C}$
Maximum Reverse Recovery Time	$t_{rr}$	50ns 75ns	$I_F=0.5A$ ; $I_R=1.0A$ ; $I_{RR}=0.25A$
Typical Junction Capacitance	$C_J$	20pF 10pF	Measured at 1.0MHz $V_R=4.0V$

\*Pulse Test: Pulse Width 300 $\mu\text{sec}$ , Duty Cycle 1%

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

# 1.0 Amp Glass Passivated Ultra 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	$\Phi$
C	0.028	0.035	0.71	0.90	$\Phi$
D	1.000	-----	25.40	-----	

## Curve Characteristics

Fig. 1 - Forward Current Derating Curve

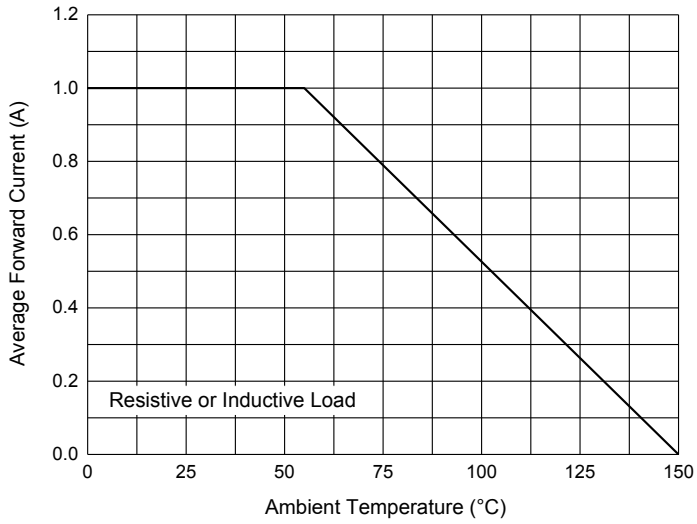


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

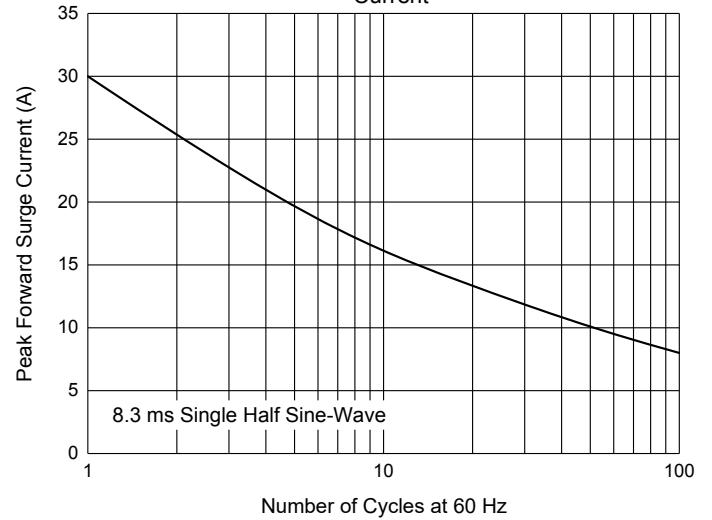


Fig. 3 - Typical Instantaneous Forward Characteristics

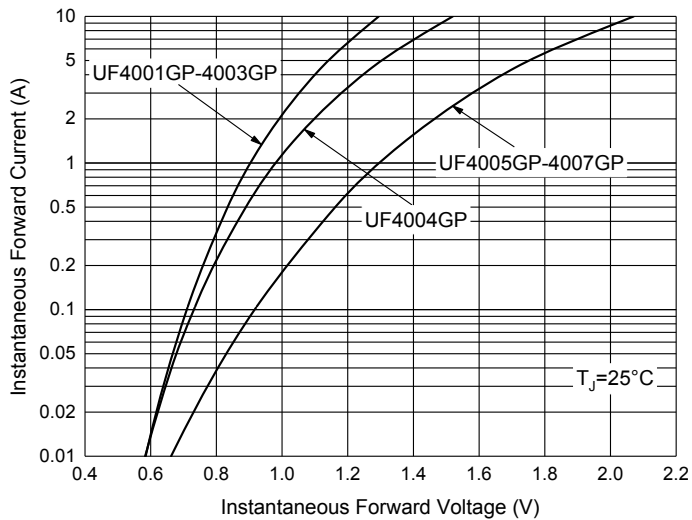
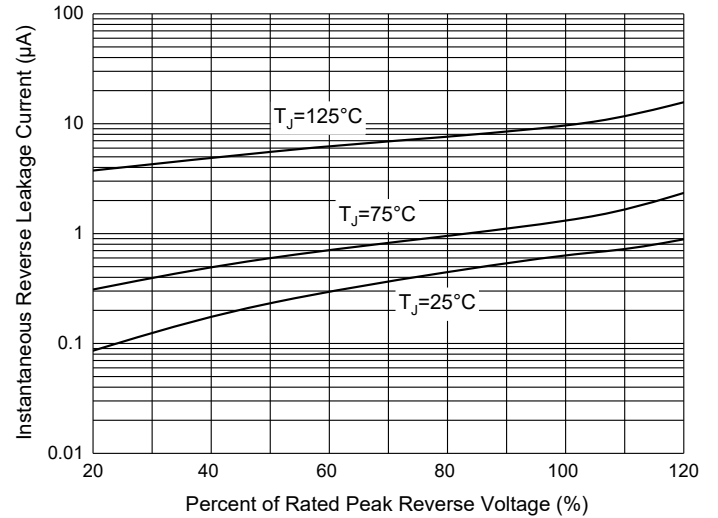


Fig. 4 - Typical Reverse Leakage Characteristics



## 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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