Micro Commercial Components

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1F1G THRU 1F7G

1.0 Amp Glass Passivated Fast Recovery Rectifier 50~1000 Volts

Features

- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix designates RoHS Compliant. See ordering information)
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Marking : Cathode band and type number
- Fast Switching for High Efficiency and Low Leakage
- Halogen free available upon request by adding suffix "-HF"

Maximum Ratings

- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C
- For capacitive load. Derate current by 20%
- Typical Thermal Resistance: 67°C/W Junction to Ambient.

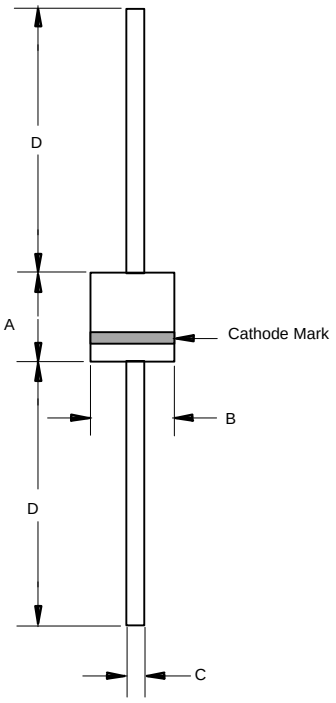
MCC Part Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
1F1G	50V	35V	50V
1F2G	100V	70V	100V
1F3G	200V	140V	200V
1F4G	400V	280V	400V
1F5G	600V	420V	600V
1F6G	800V	560V	800V
1F7G	1000V	700V	1000V

Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	1.0 A	T_a = 55°C
Peak Forward Surge Current	I_{FSM}	30A	8.3ms, half sine
Maximum Instantaneous Forward Voltage	V_F	1.3V	I_{FM} = 1.0A; T_a = 25°C
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	5.0μA 150uA	T_j =25°C T_j =125°C
Typical Junction Capacitance	C_J	12pF	Measured at 1.0MHz, V_R=4.0V
Maximum Reverse Recovery Time 1F1G-1F4G 1F5 1F6G-1F7G	t_{rr}	 150ns 250ns 500ns	 I_F=0.5A, I_R=1A, I_{rr}=0.25A

Notes:1.High Temperature Solder Exemption Applied, see EU Directive Annex 7.

R-1



DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.116	0.140	2.90	3.50	
B	0.091	0.102	2.30	2.60	
C	0.020	0.024	0.50	0.60	
D	0.787	-----	20.00	-----	

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

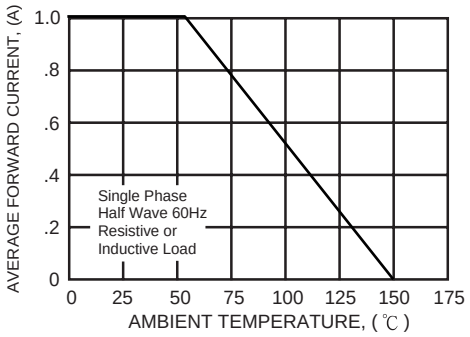


FIG. 2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

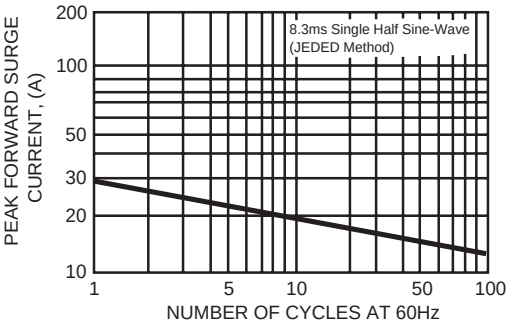


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

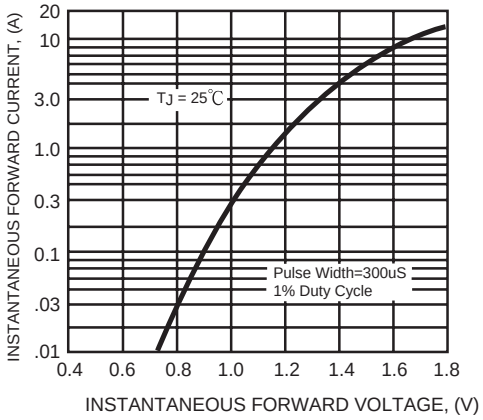


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

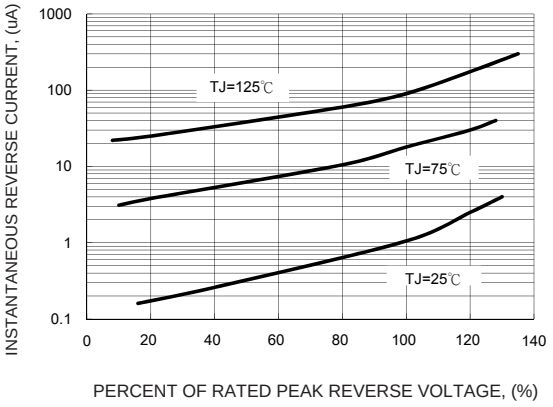


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

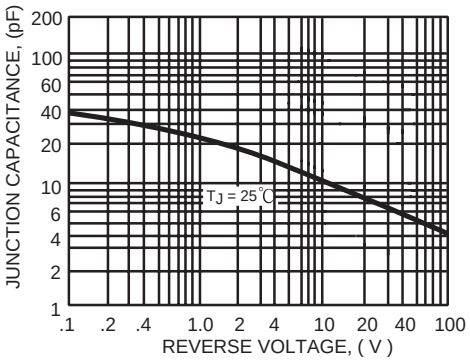
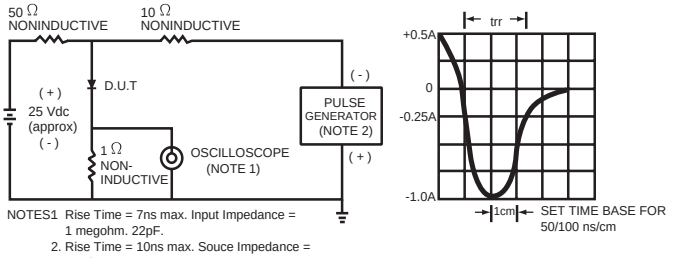


FIG. 6 - TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC



NOTES1 Rise Time = 7ns max. Input Impedance = 1 megohm. 22pF.
2. Rise Time = 10ns max. Souce Impedance = 50 ohms.

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Ordering Information :

Device	Packing
Part Number-TP	Tape&Reel: 5Kpcs/Reel
Part Number-AP	Ammo Packing: 3Kpcs/Ammo Box

Note : Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

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