·M·C·C·
Micro Commercial Components

1.0 Amp Fast Recovery Rectifier 50 to 1000 Volts

Features

• Fast Switching For High Efficiency And Low Leakage
• Glass Passivated Junction
• Epoxy Meets UL 94 V-0 Flammability Rating
• Moisture Sensitivity Level 1
• Halogen Free. "Green" Device (Note 1)
• Lead Free Finish/RoHS Compliant(Note 2)("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: 67°C/W Junction to Ambient

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

Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	1.0A	T_A=55 ºC
Peak Forward Surge Current	I_{FSM}	30A	8.3ms,Half Sine
Maximum Instantaneous Forward Voltage	V_F	1.30V	I_{FM}=1.0A; T_J=25ºC
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	5.0µA 150µA	T_J=25ºC; T_J=125ºC
Maximum Reverse Recovery Time 1F1G~1F4G 1F5G 1F6G~1F7G	t_{rr}	150ns 250ns 500ns	I_F=0.5A; I_R=1.0A; Irr=0.25A
Typical Junction Capacitance	C_J	12pF	Measured at 1.0MHz V_R=4.0V

Note: 1. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.

2. High Temperature Solder Exemptions Applied, See EU Directive Annex 7a.

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Cathode Mark

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	-----	

Curve Characteristics

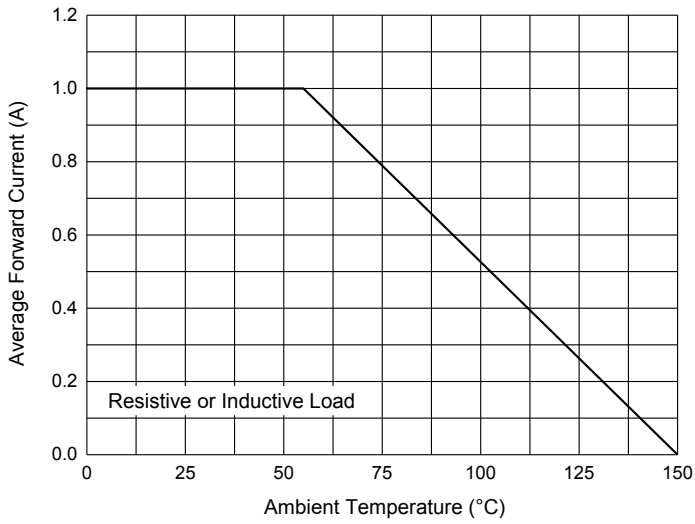Fig. 1 - Forward Current Derating Curve

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

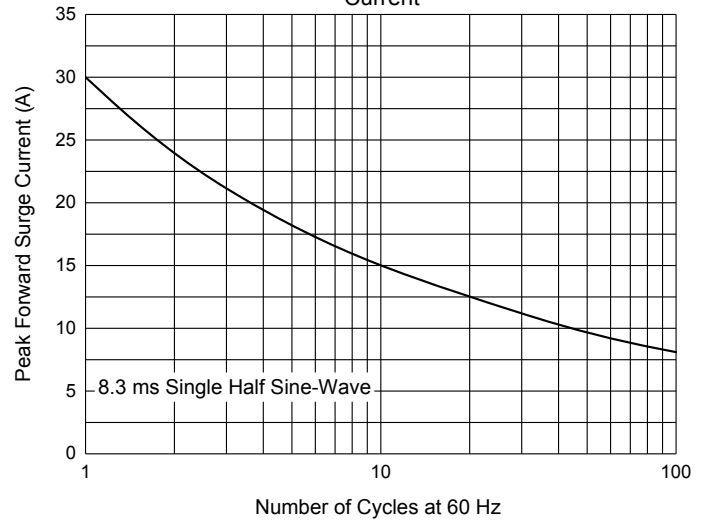

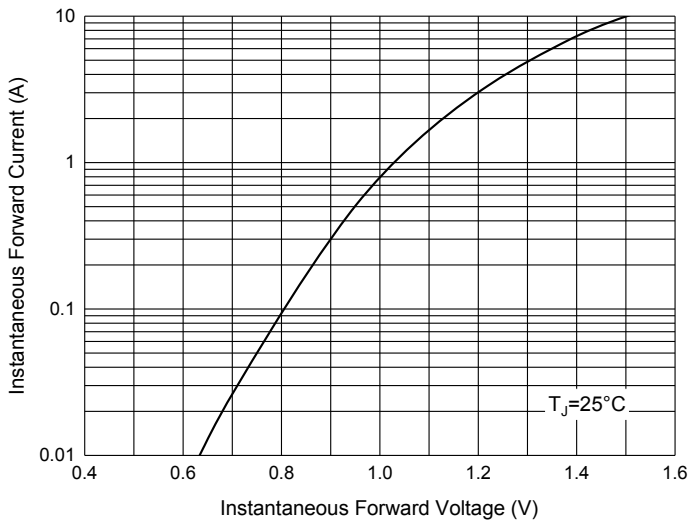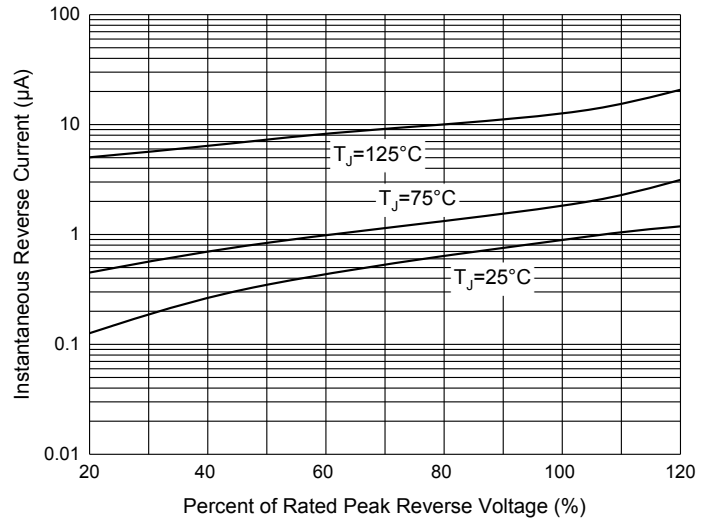Fig. 3 - Typical Instantaneous Forward Characteristics

Fig. 4 - Typical Reverse Characteristics

Ordering Information

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

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