

## Features

- High Reverse Voltage
- Low Reverse Leakage
- High Forward Surge Current Capability
- Glass Passivated Junction
- Epoxy Meets UL 94 V-0 Flammability Rating
- Halogen Free Available Upon Request By Adding Suffix "-HF"
- Lead Free Finish/RoHS Compliant (Note2) ("P" Suffix Designates Compliant. See Ordering Information)

## Maximum Ratings

- Operating Junction Temperature Range: -65°C to +150°C
- Storage Temperature Range: -65°C to +150°C
- Typical Thermal Resistance(Note 1): 50°C/W Junction to Ambient

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
EM513GP	EM513GP	1600V	1120V	1600V
EM516GP	EM516GP	1800V	1260V	1800V
EM518GP	EM518GP	2000V	1400V	2000V

## Electrical Characteristics @ 25°C Unless Otherwise Specified

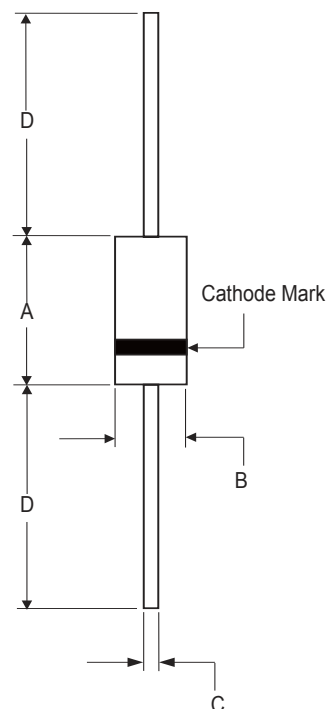
Average Forward Current	$I_O$	1.0A	0.375" (9.5mm) Lead Length $T_A = 55^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	25A	8.3ms, Half Sine
Maximum Instantaneous Forward Voltage	$V_F$	1.25V	$I_{FM}=1.0A$ ; $T_J=25^\circ\text{C}$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	5.0 $\mu\text{A}$ 50 $\mu\text{A}$	$T_J=25^\circ\text{C}$ ; $T_J=100^\circ\text{C}$
Typical Junction Capacitance	$C_J$	15pF	Measured at 1.0MHz $V_R=4.0V$

Note: 1. Thermal Resistance From Junction to Ambient at 0.375" (9.5mm) Lead Length, P.C. Board Mounted.

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

# 1.0 Amp General Purpose Plastic Rectifier 1600 to 2000 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	Φ
C	0.028	0.035	0.71	0.90	Φ
D	1.000	-----	25.40	-----	

**Curve Characteristics**

Fig. 1 - Forward Current Derating Curve

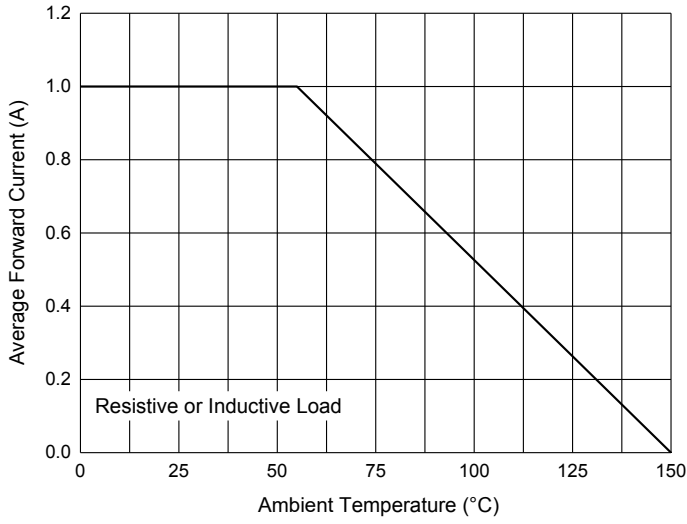


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

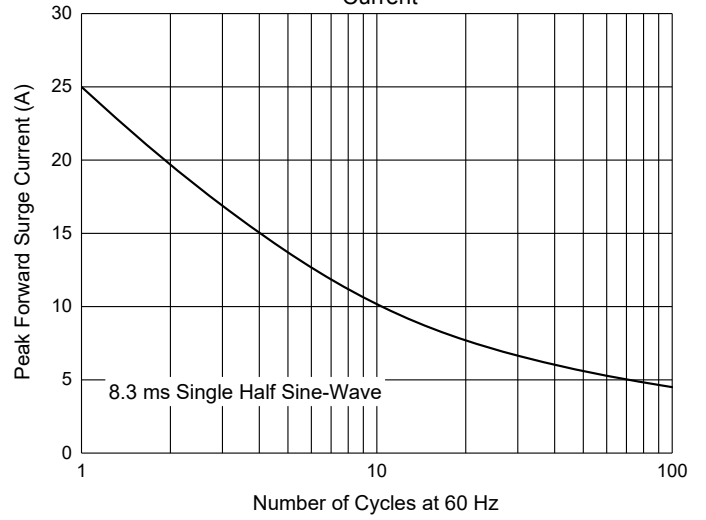


Fig. 3 - Typical Instantaneous Forward Characteristics

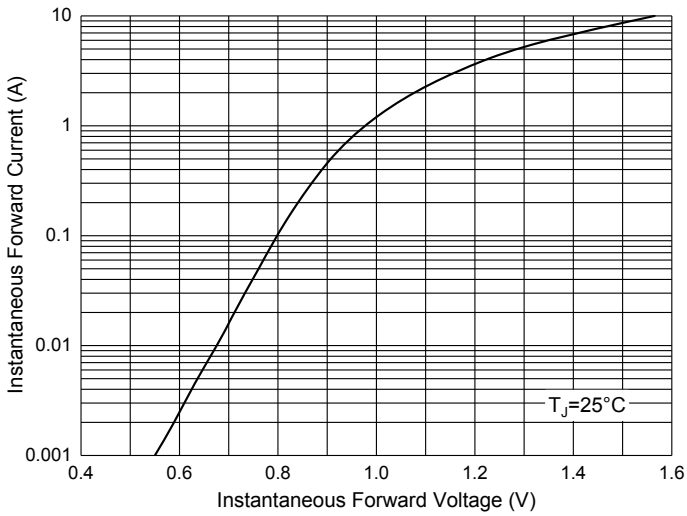
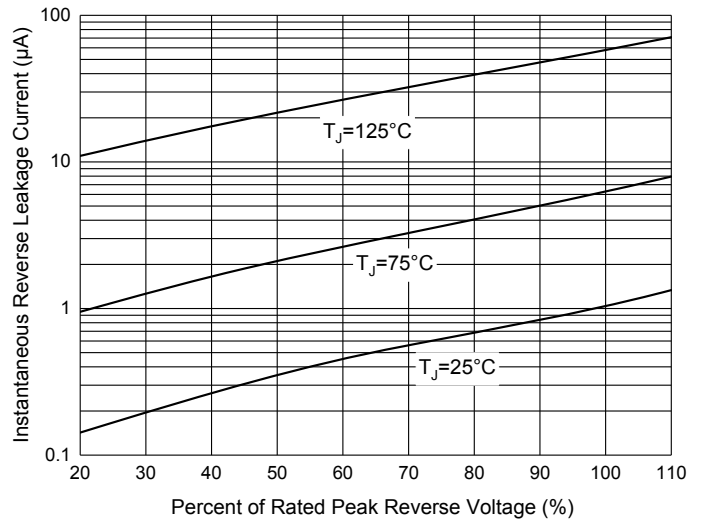


Fig. 4 - Typical Reverse Leakage Characteristics



## 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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