



Micro Commercial Components

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20736 Marilla Street Chatsworth  
CA 91311  
Phone: (818) 701-4933  
Fax: (818) 701-4939

## Features

- High Reliability
- Low Leakage
- Low Forward Voltage Drop
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0 and MSL Rating 1
- Polarity: Indicated by Cathode Band
- Lead Free Finish/Rohs Compliant (Note1) ("P" Suffix designates RoHS Compliant. See ordering information)

## Maximum Ratings

- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C
- Maximum Thermal Resistance: 60°C/W Junction to Ambient

MCC Catalog Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
1A1	1A1	50V	35V	50V
1A2	1A2	100V	70V	100V
1A3	1A3	200V	140V	200V
1A4	1A4	400V	280V	400V
1A5	1A5	600V	420V	600V
1A6	1A6	800V	560V	800V
1A7	1A7	1000V	700V	1000V

## Electrical Characteristics @ 25°C Unless Otherwise Specified

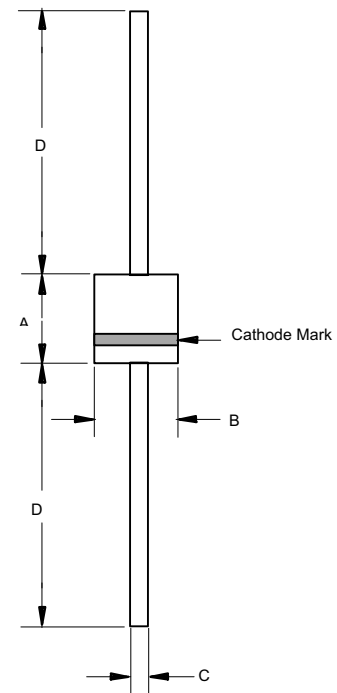
Average Forward Current	$I_{F(AV)}$	1.0A	$T_J=25^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	30.0A	8.3ms half sine
Maximum Instantaneous Forward Voltage	$V_F$	1.1V	$I_{FM}=1.0A$ $T_A=25^\circ\text{C}$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	5.0uA 500uA	$T_J=25^\circ\text{C}$ $T_J=100^\circ\text{C}$
Typical Junction Capacitance	$C_J$	15pF	Measured at 1.0MHz, $V_R=4.0V$

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

# 1A1 THRU 1A7

## 1 Amp Miniature Plastic Silicon Rectifier 50 to 1000 Volts

R-1



DIM	DIMENSIONS				NOTE
	INCHES		MM		
	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	-----	

# 1A1 thru 1A7

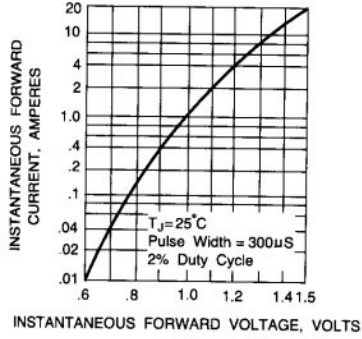


Fig. 1 - TYPICAL FORWARD CHARACTERISTICS

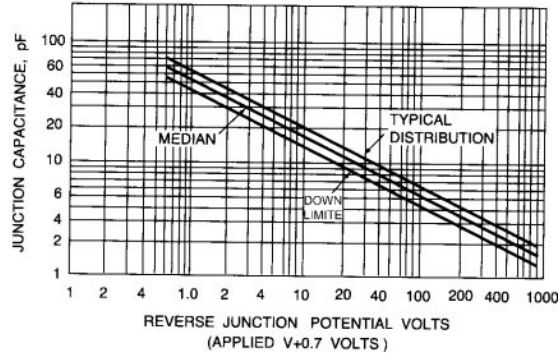


Fig. 2 - JUNCTION CAPACITANCE (See Application Note 2)

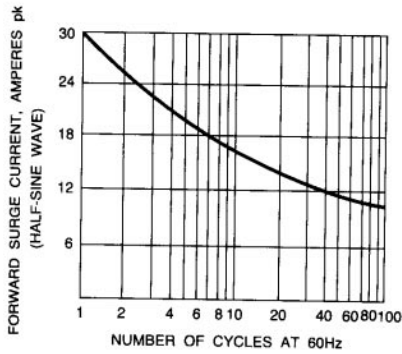


Fig. 3 - MAXIMUM OVERLOAD SURGE-CURRENT

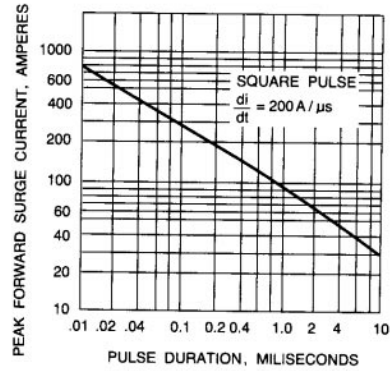


Fig. 4 - PEAK FORWARD SURGE CURRENT

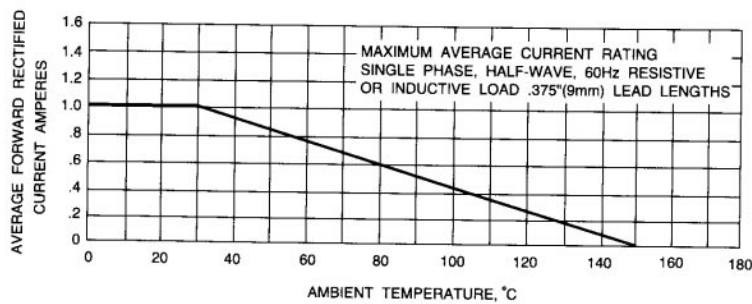


Fig. 5 - FORWARD DERATING CURVE



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## Ordering Information

Device	Packing
(Part Number)-TP	Tape&Reel; 5Kpcs/Reel
(Part Number)-AP	Ammo Packing;3Kpcs/AmmoBox
(Part Number)-BP	Bulk;1Kpcs/Box

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