

# 1A1 THRU 1A7

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

### Features

- High Reliability
- Halogen free available upon request by adding suffix "-HF"
- Low Forward Voltage Drop, Low Leakage
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Polarity: Indicated by Cathode Band
- Lead Free Finish/Rohs Compliant (Note1) ("P" Suffix designates RoHS Compliant. See ordering information)

### Maximum Ratings

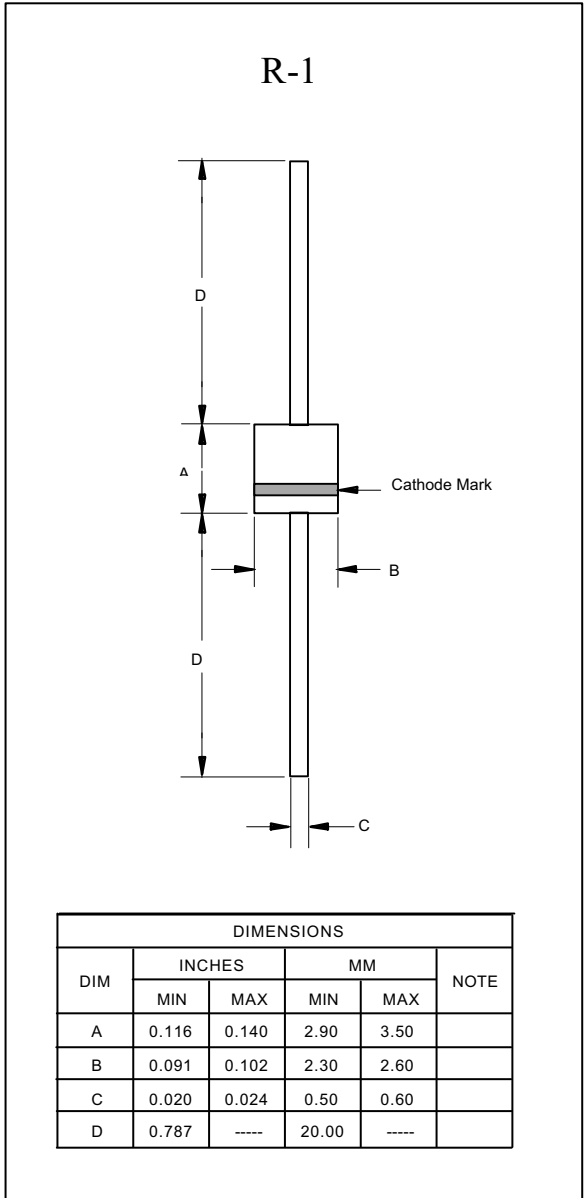
- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C
- Maximum Thermal Resistance: 60°C/W Junction to Ambient

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	$I_{FM}=1.0A \quad T_A=25^\circ\text{C}$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	5.0µA 50µA	$T_J=25^\circ\text{C}$ $T_J=100^\circ\text{C}$
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

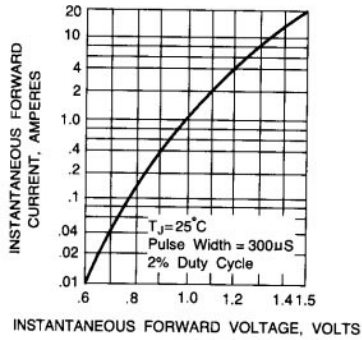


Fig. 1 - TYPICAL FORWARD CHARACTERISTICS

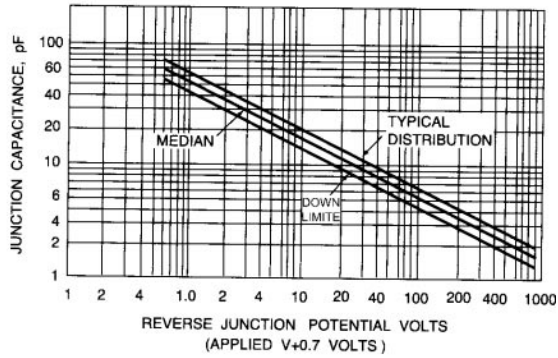


Fig. 2 - JUNCTION CAPACITANCE (See Application Note 2)

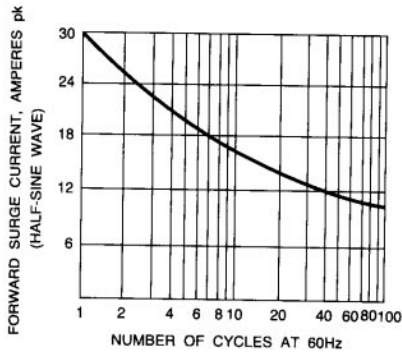


Fig. 3 - MAXIMUM OVERLOAD SURGE-CURRENT

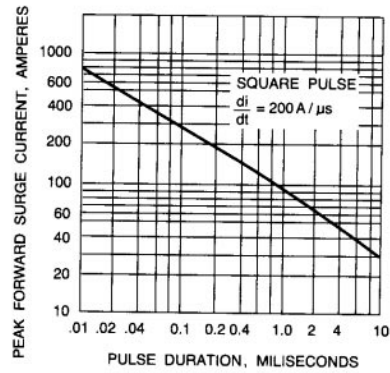


Fig. 4 - PEAK FORWARD SURGE CURRENT

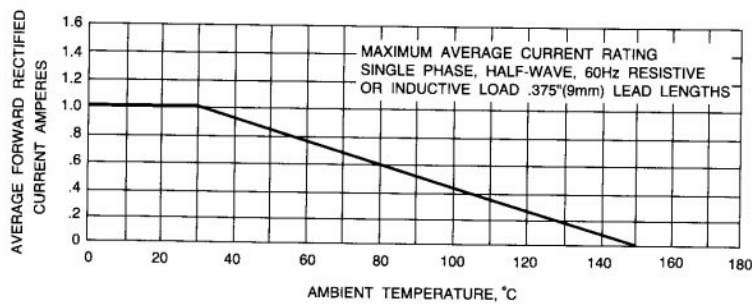


Fig. 5 - FORWARD DERATING CURVE



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### Ordering Information :

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

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

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