



Micro Commercial Components



Micro Commercial Components  
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**R1200  
 THRU  
 R2000**

## Features

- Low Cost
- Lead Free Finish/RoHS Compliant (Note1) ("P" Suffix designates Compliant. See ordering information)
- High Current Capability
- High Voltage
- 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
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1

| MCC Catalog Number | Device Marking | Maximum Recurrent Peak Reverse Voltage | Maximum RMS Voltage | Maximum DC Blocking Voltage |
|--------------------|----------------|--|---------------------|-----------------------------|
| R1200              | R1200          | 1200V                                  | 840V                | 1200V                       |
| R1500              | R1500          | 1500V                                  | 1050V               | 1500V                       |
| R1800              | R1800          | 1800V                                  | 1260V               | 1800V                       |
| R2000              | R2000          | 2000V                                  | 1400V               | 2000V                       |

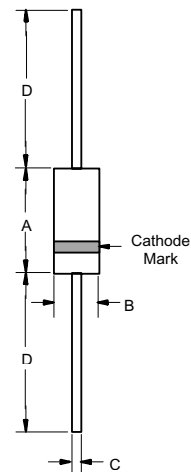
## Electrical Characteristics @ 25°C Unless Otherwise Specified

|   |             |               |   |
|---|-------------|---------------|---|
| Average Forward Current                                       | $I_{F(AV)}$ | 500mA         | $T_A = 50^\circ\text{C}$                              |
| Peak Forward Surge Current                                    | $I_{FSM}$   | 30A           | 8.3ms, half sine                                      |
| Maximum Instantaneous Forward Voltage<br>R1200-R1800<br>R2000 | $V_F$       | 2.0V<br>3.0V  | $I_{FM} = 0.5A$ ;<br>$T_A = 50^\circ\text{C}$         |
| Maximum DC Reverse Current At Rated DC Blocking Voltage       | $I_R$       | 5.0μA<br>50μA | $T_A = 25^\circ\text{C}$<br>$T_A = 100^\circ\text{C}$ |
| Typical Junction Capacitance                                  | $C_J$       | 30pF          | Measured at 1.0MHz, $V_R=4.0V$                        |

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

**500 Milliamp  
 High Voltage  
 Silicon Rectifier  
 1200 to 2000 Volts**

DO-41



| DIM | DIMENSIONS |          |           |          | NOTE |
|-----|------------|----------|-----------|----------|------|
|     | INCHES     |          | MM        |          |      |
| A   | MIN .166   | MAX .205 | MIN 4.10  | MAX 5.20 |      |
| B   | MIN .080   | MAX .107 | MIN 2.00  | MAX 2.70 |      |
| C   | MIN .028   | MAX .034 | MIN .70   | MAX .90  |      |
| D   | MIN 1.000  | MAX ---  | MIN 25.40 | MAX ---  |      |

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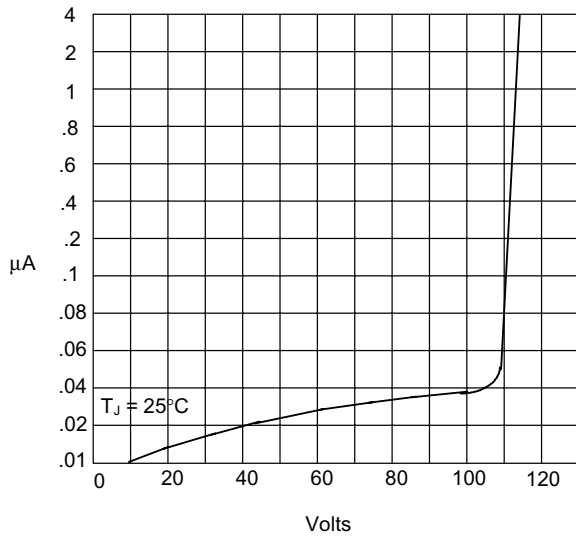
Revision: B

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2013/01/01

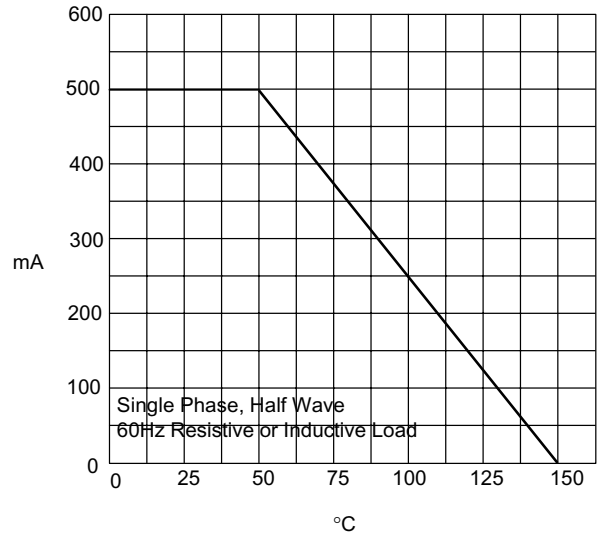
R1200 - R2000

Figure 1  
Typical Reverse Characteristics



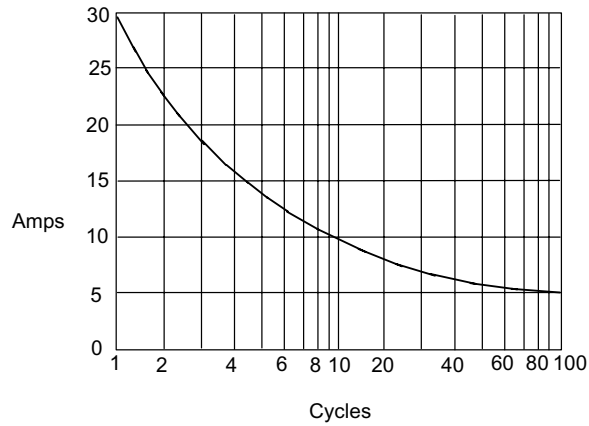
Instantaneous Reverse Current - Micro Amperes versus  
Percent Of Rated Peak Reverse Voltage - Volts

Figure 2  
Forward Derating Curve



Average Forward Rectified Current - Amperes versus  
Ambient Temperature - °C

Figure 3  
Peak Forward Surge Current



Peak Forward Surge Current - Amperes versus  
Number Of Cycles At 60Hz - Cycles



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### Ordering Information :

| Device         | Packing                      |
|----------------|------------------------------|
| Part Number-TP | Tape&Reel: 5Kpcs/Reel        |
| Part Number-AP | Ammo Packing: 5Kpcs/Ammo Box |
| Part Number-BP | Bulk: 50Kpcs/Carton          |

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

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