

**Micro Commercial Components** 



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## **Features**

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

## Maximum Ratings

- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C
- Typical Thermal Resistance (R<sub>θJA</sub>) 40°C/W

| MCC<br>Catalog<br>Number | Device<br>Marking | Maximum<br>Recurrent<br>Peak Reverse<br>Voltage | Maximum<br>RMS<br>Voltage | Maximum<br>DC<br>Blocking<br>Voltage |
|--------------------------|-------------------|---|---------------------------|--------------------------------------|
| 2A01                     | 2A01              | 50V   | 35V                       | 50V                                  |
| 2A02                     | 2A02              | 100V  | 70V                       | 100V                                 |
| 2A03                     | 2A03              | 200V  | 140V                      | 200V                                 |
| 2A04                     | 2A04              | 400V  | 280V                      | 400V                                 |
| 2A05                     | 2A05              | 600V  | 420V                      | 600V                                 |
| 2A06                     | 2A06              | 800V  | 560V                      | 800V                                 |
| 2A07                     | 2A07              | 1000V   | 700V                      | 1000V                                |

### Hectrical Characteristics @25°CUhless Otherwise Specified

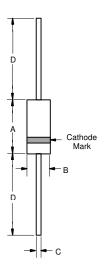
| Average Forward<br>Current                              | $I_{F(AV)}$      | 2 A           | T <sub>A</sub> = 75°C                            |
|---|------------------|---------------|--|
| Peak Forward Surge<br>Current                           | I <sub>FSM</sub> | 60A           | 8.3ms, half sine                                 |
| Maximum<br>Instantaneous<br>Forward Voltage             | V <sub>F</sub>   | 1.0V          | I <sub>FM</sub> = 2.0A;<br>T <sub>A</sub> = 25°C |
| Maximum DC Reverse Current At Rated DC Blocking Voltage | I <sub>R</sub>   | 5.0μA<br>50μA | T <sub>A</sub> = 25°C<br>T <sub>A</sub> = 100°C  |
| Typical Junction<br>Capacitance                         | CJ               | 20pF          | Measured at 1.0MHz, V <sub>R</sub> =4.0V         |

<sup>\*</sup>Pulse Test: Pulse Width 300µsec, Duty Cycle 1%

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

# 2 Amp Silicon Rectifier 50 to 1000 Volts

## **DO-15**



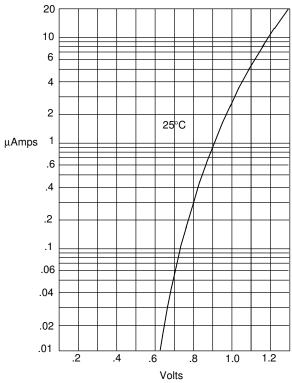
| DIMENSIONS |        |      |       |      |      |  |  |
|------------|--------|------|-------|------|------|--|--|
|            | INCHES |      | MM    |      |      |  |  |
| DIM        | MIN    | MAX  | MIN   | MAX  | NOTE |  |  |
| Α          | .230   | .300 | 5.80  | 7.60 |      |  |  |
| В          | .104   | .140 | 2.60  | 3.60 |      |  |  |
| С          | .026   | .034 | .70   | .90  |      |  |  |
| D          | 1.000  |      | 25.40 |      |      |  |  |

## 2A01 thru 2A07

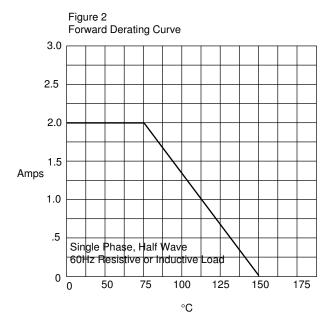
·M·C·C·

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Figure 1 Typical Forward Characteristics

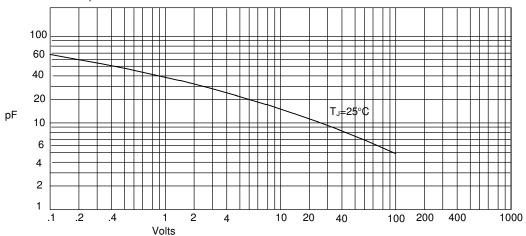


Instantaneous Forward Current - MicroAmperesversus Instantaneous Forward Voltage - Volts



Average Forward Rectified Current - Amperes/ersus Ambient Temperature - $^{\circ}$ C



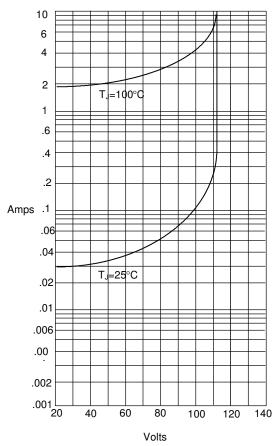


Junction Capacitance - pF*versus* Reverse Voltage - Volts

## 2A01 thru 2A07

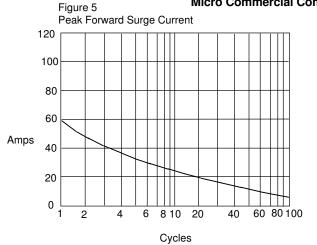


Figure 4
Typical Reverse Characteristics



Instantaneous Reverse Current - Amps*versus* Percent Of Rated Peak Reverse Voltage - Volts

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Peak Forward Surge Current - Amperesversus Number Of Cycles At 60Hz - Cycles



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## Ordering Information:

| Device         | Packing                      |
|----------------|------------------------------|
| Part Number-TP | Tape&Reel: 4Kpcs/Reel        |
| Part Number-AP | Ammo Packing: 3Kpcs/Ammo Box |
| Part Number-BP | Bulk: 25Kpcs/Carton          |

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

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