

**Micro Commercial Components** 



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# 10A01GP THRU 10A07GP

## **Features**

- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix designates RoHS Compliant. See ordering information)
- High Current Capability and Low Forward Voltage Drop
- Surge Overload Rating to 200A Peak
- Low Reverse Leakage Current and Galss Passivared Junction
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- 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

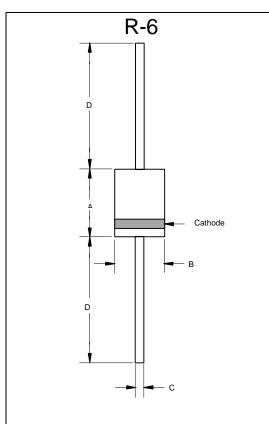
| MCC     | Device  | Maximum      | Maximum | Maximum  |
|---------|---------|--------------|---------|----------|
| Catalog | Marking | Reccurrent   | RMS     | DC       |
| Number  |         | Peak Reverse | Voltage | Blocking |
|         |         | Voltage      |         | Voltage  |
| 10A01GP | 10A01GP | 50V          | 35V     | 50V      |
| 10A02GP | 10A02GP | 100V         | 70V     | 100V     |
| 10A03GP | 10A03GP | 200V         | 140V    | 200V     |
| 10A04GP | 10A04GP | 400V         | 280V    | 400V     |
| 10A05GP | 10A05GP | 600V         | 420V    | 600V     |
| 10A06GP | 10A06GP | 800V         | 560V    | 800V     |
| 10A07GP | 10A07GP | 1000V        | 700V    | 1000V    |

### Electrical Characteristics @ 25°C Unless Otherwise Specified

| Average Forward Current                                 | I <sub>F(AV)</sub> | 10 A          | $T_A = 50^{\circ}C$                            |
|---------------------------------------------------------|--------------------|---------------|------------------------------------------------|
| Peak Forward Surge                                      | I <sub>FSM</sub>   | 200A          | 8.3ms, half sine                               |
| Current<br>Maximum                                      |                    |               | I <sub>FM</sub> = 10A;                         |
| Instantaneous Forward Voltage                           | $V_{F}$            | 1.2V          | $T_A = 25^{\circ}C$                            |
| Maximum DC Reverse Current At Rated DC Blocking Voltage | I <sub>R</sub>     | 10μΑ<br>100μΑ | T <sub>A</sub> = 25°C<br>T <sub>A</sub> = 100C |
| Typical Junction                                        |                    |               |                                                |
| Capacitance                                             | CJ                 | 150pF         | Measured at 1.0MHz, V <sub>R</sub> =4.0V       |
| Typical Thermal<br>Resistance Junction<br>to Ambien     | R <sub>thJA</sub>  | 10K/W         |                                                |

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

# 10 Amp Glass Passivated Rectifier 50 to 1000 Volts

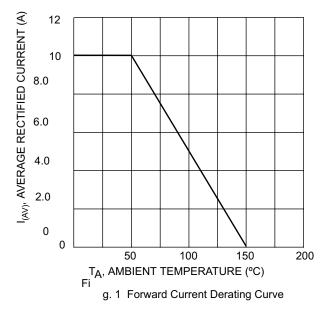


| DIMENSIONS |        |      |       |      |      |  |  |
|------------|--------|------|-------|------|------|--|--|
|            | INCHES |      | MM    |      |      |  |  |
| DIM        | MIN    | MAX  | MIN   | MAX  | NOTE |  |  |
| Α          | .340   | .360 | 8.60  | 9.10 |      |  |  |
| В          | .340   | .360 | 8.60  | 9.10 |      |  |  |
| С          | .048   | .052 | 1.20  | 1.30 |      |  |  |
| D          | 1.000  |      | 25.40 |      |      |  |  |

# 10A01GP thru 10A07GP



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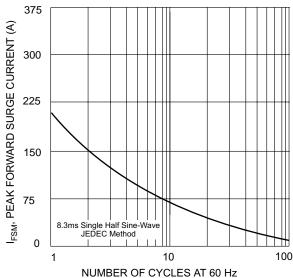
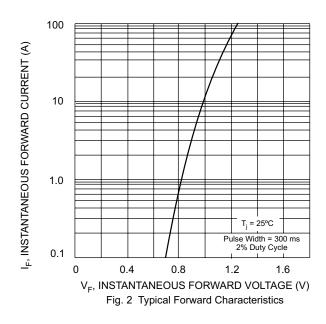
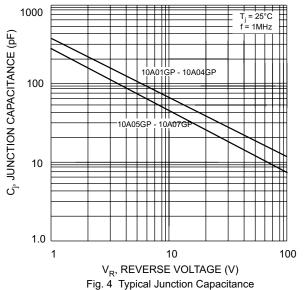


Fig. 3 Maximum Non-Repetitive Peak Forward Surge Current







## **Ordering Information:**

| Device         | Packing                       |
|----------------|-------------------------------|
| Part Number-TP | Tape&Reel: 500pcs/Reel        |
| Part Number-AP | Ammo Packing: 450pcs/Ammo Box |
| Part Number-BP | Bulk: 4.8Kpcs/Carton          |

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

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