

## Features

- High Current Capability And Low Leakage
- Low Forward Voltage Drop
- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 1
- Halogen Free Available Upon Request By Adding Suffix "-HF"
- Lead Free Finish/RoHS Compliant (Note1) ("P" Suffix Designates Compliant. See Ordering Information)

## Maximum Ratings

- Operating Junction Temperature Range: -55°C to +125°C
- Storage Temperature Range: -55°C to +150°C
- Maximum Thermal Resistance: 10°C/W Junction to Ambient

| MCC Part Number | Device Marking | Maximum Recurrent Peak Reverse Voltage | Maximum RMS Voltage | Maximum DC Blocking Voltage |
|-----------------|----------------|--|---------------------|-----------------------------|
| 6A05            | 6A05           | 50V                                    | 35V                 | 50V                         |
| 6A1             | 6A1            | 100V                                   | 70V                 | 100V                        |
| 6A2             | 6A2            | 200V                                   | 140V                | 200V                        |
| 6A4             | 6A4            | 400V                                   | 280V                | 400V                        |
| 6A6             | 6A6            | 600V                                   | 420V                | 600V                        |
| 6A8             | 6A8            | 800V                                   | 560V                | 800V                        |
| 6A10            | 6A10           | 1000V                                  | 700V                | 1000V                       |

## Electrical Characteristics @ 25°C Unless Otherwise Specified

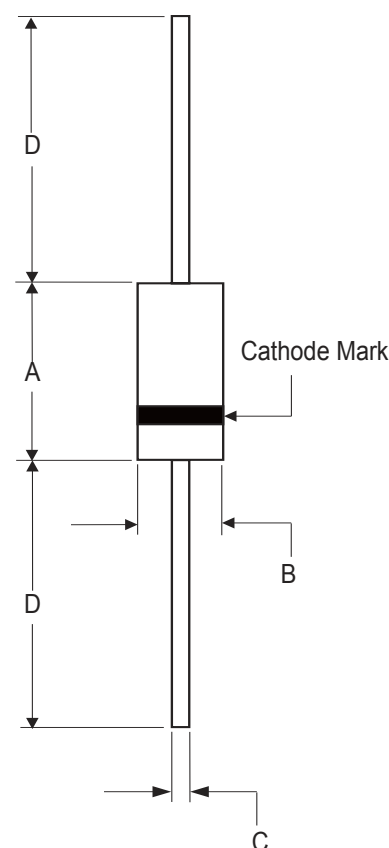
|   |             |                                       |   |
|---|-------------|---------------------------------------|---|
| Average Forward Current                                 | $I_{F(AV)}$ | 6.0A                                  | $T_A=60^\circ\text{C}$  |
| Peak Forward Surge Current                              | $I_{FSM}$   | 400A                                  | 8.3ms, Half Sine  |
| Maximum Instantaneous Forward Voltage                   | $V_F$       | 0.95V                                 | $I_{FM}=6.0\text{A};$<br>$T_J=25^\circ\text{C}(\text{Note } 2)$ |
| Maximum DC Reverse Current At Rated DC Blocking Voltage | $I_R$       | 10 $\mu\text{A}$<br>100 $\mu\text{A}$ | $T_J=25^\circ\text{C};$<br>$T_J=100^\circ\text{C}$              |
| Typical Junction Capacitance                            | $C_J$       | 150pF                                 | Measured at 1.0MHz, $V_R=4.0\text{V}$                           |

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

2. Pulse Test: Pulse Width 300  $\mu\text{sec}$ , Duty Cycle 1%

# 6 Amp Rectifier 50 to 1000 Volts

R-6



| DIM | DIMENSIONS |       |       |       | NOTE |
|-----|------------|-------|-------|-------|------|
|     | INCHES     |       | MM    |       |      |
|     | MIN        | MAX   | MIN   | MAX   |      |
| A   | 0.340      | 0.360 | 8.60  | 9.10  |      |
| B   | 0.340      | 0.360 | 8.60  | 9.10  |      |
| C   | 0.048      | 0.052 | 1.20  | 1.32  |      |
| D   | 1.000      | ----- | 25.40 | ----- |      |

## Curve Characteristics

Fig. 1 - Forward Current Derating Curve

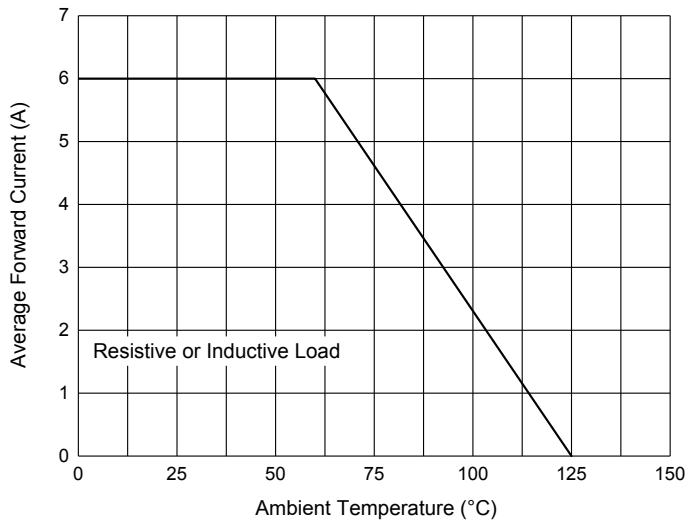


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

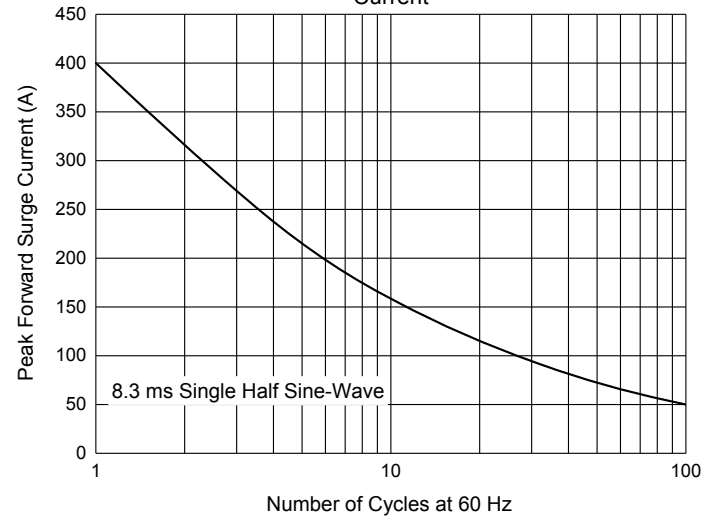


Fig. 3 - Typical Instantaneous Forward Characteristics

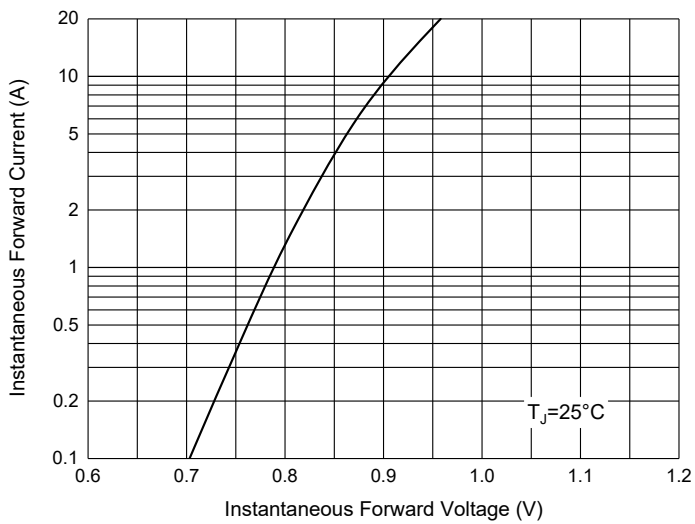
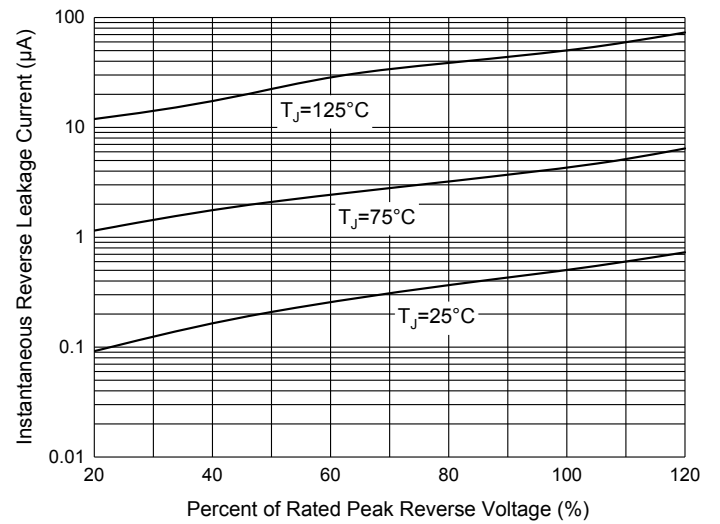


Fig. 4 - Typical Reverse Leakage Characteristics



## 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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