



Micro Commercial Components



Micro Commercial Components  
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# 60S05 thru 60S10

## 6 Amp Axial-Lead Glass Passivated Rectifier 50 - 1000 Volts

### Features

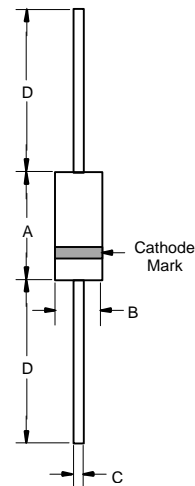
- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix designates RoHS Compliant. See ordering information)
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- High Surge Current Capability and Low Leakage
- Glass Passivated Chip

### Maximum Ratings

- Operating Junction Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C

| MCC Catalog Number | Device Marking | Maximum Reccurent Peak Reverse Voltage | Maximum RMS Voltage | Maximum DC Blocking Voltage |
|--------------------|----------------|--|---------------------|-----------------------------|
| 60S05              | 60S05          | 50V                                    | 35V                 | 50V                         |
| 60S1               | 60S1           | 100V                                   | 70V                 | 100V                        |
| 60S2               | 60S2           | 200V                                   | 140V                | 200V                        |
| 60S4               | 60S4           | 400V                                   | 280V                | 400V                        |
| 60S6               | 60S6           | 600V                                   | 420V                | 600V                        |
| 60S8               | 60S8           | 800V                                   | 560V                | 800V                        |
| 60S10              | 60S10          | 1000V                                  | 700V                | 1000V                       |

### DO-201AD



| DIM | INCHES |      | MM    |      | NOTE |
|-----|--------|------|-------|------|------|
|     | MIN    | MAX  | MIN   | MAX  |      |
| A   | .287   | .374 | 7.30  | 9.50 |      |
| B   | .189   | .208 | 4.80  | 5.30 |      |
| C   | .048   | .052 | 1.20  | 1.30 |      |
| D   | 1.000  | ---  | 25.40 | ---  |      |

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

|   |             |                                    |   |
|---|-------------|------------------------------------|---|
| Average Forward Current                                 | $I_{F(AV)}$ | 6.0A                               | $T_A = 100^\circ\text{C}$                             |
| Peak Forward Surge Current                              | $I_{FSM}$   | 200A                               | 8.3ms, half sine                                      |
| Maximum Instantaneous Forward Voltage                   | $V_F$       | 1.0V                               | $I_{FM} = 6.0A;$<br>$T_J = 25^\circ\text{C}^*$        |
| Maximum DC Reverse Current At Rated DC Blocking Voltage | $I_R$       | $5\mu\text{A}$<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<br>1.0MHz, $V_R=4.0V$                     |

Notes:1.High Temperature Solder Exemption Applied, see EU Directive Annex 7.  
2.Pulse test: Pulse width 300 sec, Duty cycle 1%

Figure 1  
Typical Forward Characteristics

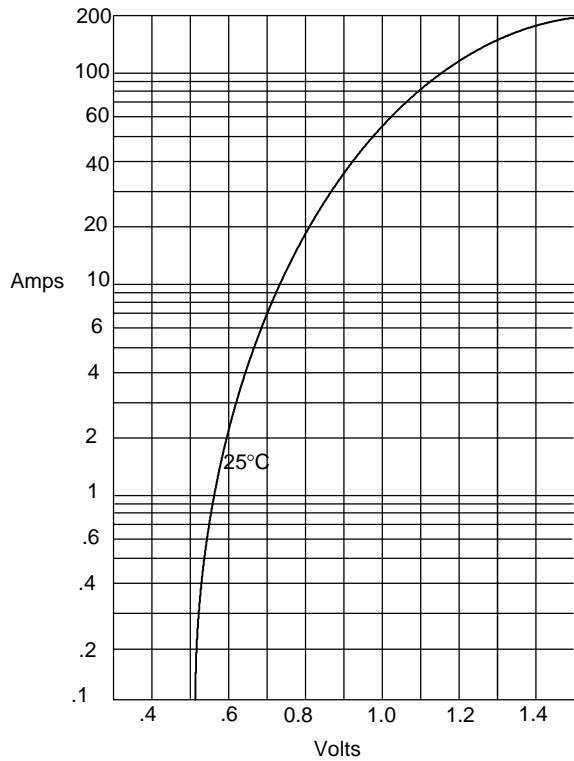
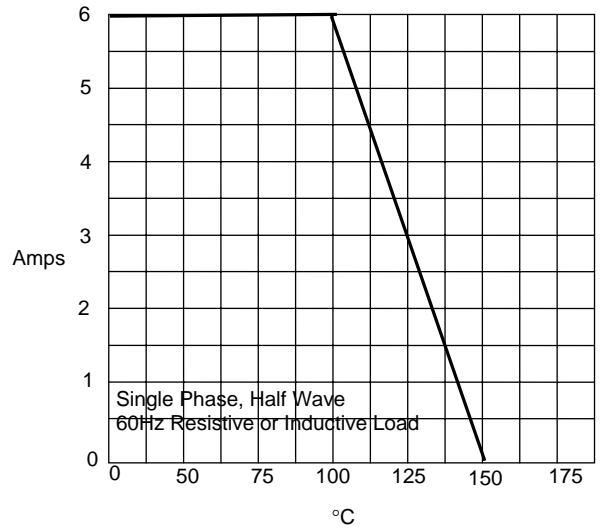
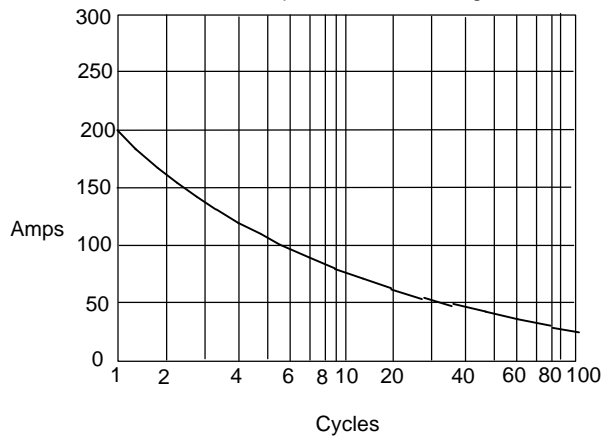


Figure 2  
Forward Derating Curve



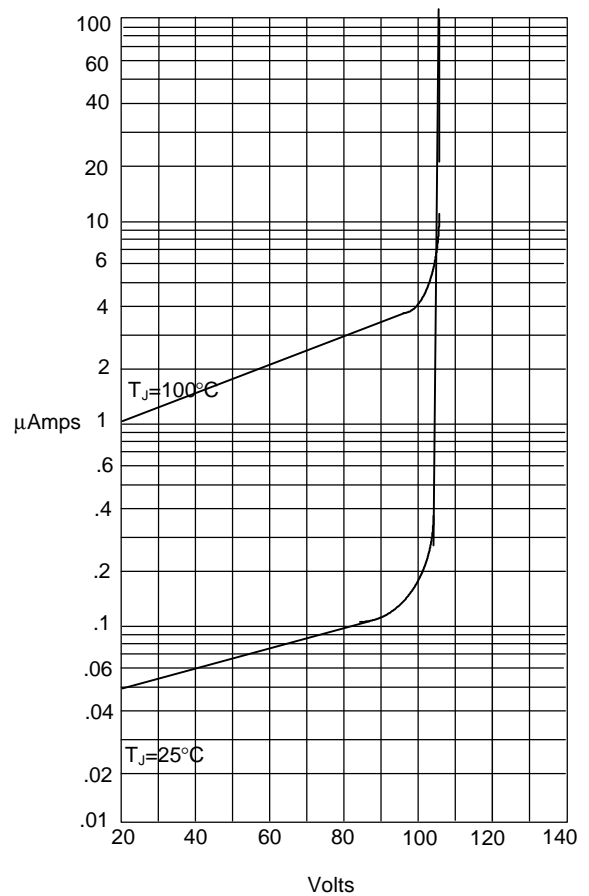
Average Forward Rectified Current - Amperes versus Ambient Temperature - °C

Figure 3  
Maximum Non-Repetitive Forward Surge Current



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

Figure 4  
Typical Reverse Characteristics



Instantaneous Reverse Leakage Current - MicroAmperes versus Percent Of Rated Peak Reverse Voltage - Volts



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### Ordering Information :

| Device         | Packing                        |
|----------------|--------------------------------|
| Part Number-TP | Tape&Reel: 1.2Kpcs/Reel        |
| Part Number-AP | Ammo Packing: 1.2Kpcs/Ammo Box |
| Part Number-BP | Bulk: 12Kpcs/Carton            |

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