



Micro Commercial Components

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Features

- High Reliability
- Low Current Leakage
- Metalurgically Bonded Construction
- Moisture Sensitivity: Level 1 per J-STD-020C
- Marking : Cathode band and type number
- Lead Free Finish/Rohs Compliant (Note1) ("P" Suffix designates Compliant. See ordering information)

Maximum Ratings

- Operating Temperature: -65°C to +175°C
- Storage Temperature: -65°C to +175°C
- Maximum Thermal Resistance: 300K/W Junction To Ambient

Electrical Characteristics @ 25°C Unless Otherwise Specified

| | | | |
|---|-----------|-----------------------------------|--|
| Reverse Voltage | V_R | 75V | |
| Breakdown Voltage | V_{BR} | 100V | $I_R=100 \mu A$ |
| Average Forward Current | I_O | 150mA | |
| Power Dissipation | P_{TOT} | 500mW | |
| Junction Temperature | T_J | 175°C | |
| Peak Forward Surge Current | I_{FSM} | 2.0A | $t_p = 1.0 \mu s$ |
| Maximum Instantaneous Forward Voltage | V_F | 1.0V | $I_{FM} = 10mA$ |
| Maximum DC Reverse Current At Rated DC Blocking Voltage | I_R | 25nA 5.0 μA 50 μA | $V_R=20V; T_J = 25^\circ C$ $V_R=75V; T_J = 25^\circ C$ $V_R=20V; T_J = 150^\circ C$ |
| Maximum Junction Capacitance | C_J | 4.0pF | Measured at 1.0MHz, $V_R=0V$ |
| Maximum Reverse Recovery Time | T_{rr} | 4.0ns | $I_F=10mA; V_R = 6V$ $R_L=100\Omega$ |

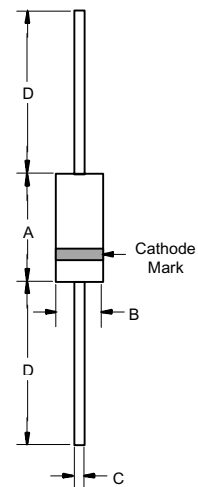
*Pulse test: Pulse width 300 μsec , Duty cycle 2%

Note: 1. Lead in Glass Exemption Applied, see EU Directive Annex 5.

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500mW High Speed Switching Diode 100 Volt

DO-35



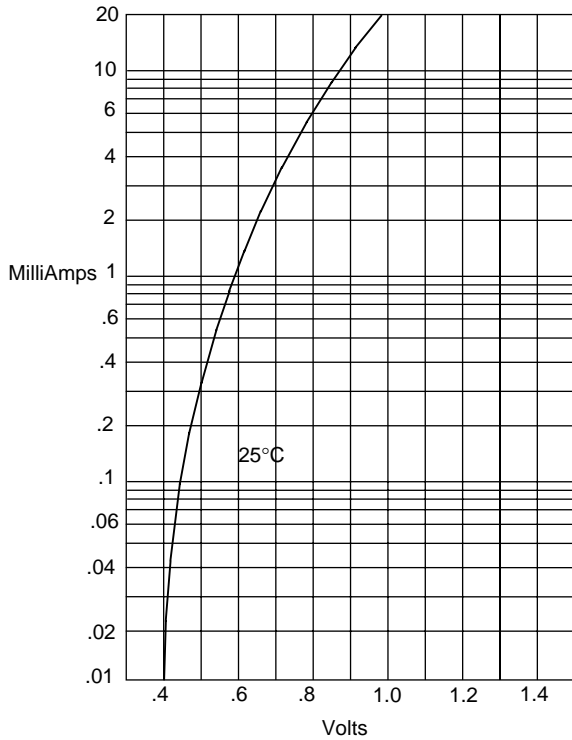
| DIM | DIMENSIONS | | | | NOTE |
|-----|------------|------|-------|------|------|
| | INCHES | | MM | | |
| | MIN | MAX | MIN | MAX | |
| A | --- | .166 | --- | 4.2 | |
| B | --- | .079 | --- | 2.00 | |
| C | --- | .020 | --- | .52 | |
| D | 1.000 | --- | 25.40 | --- | |

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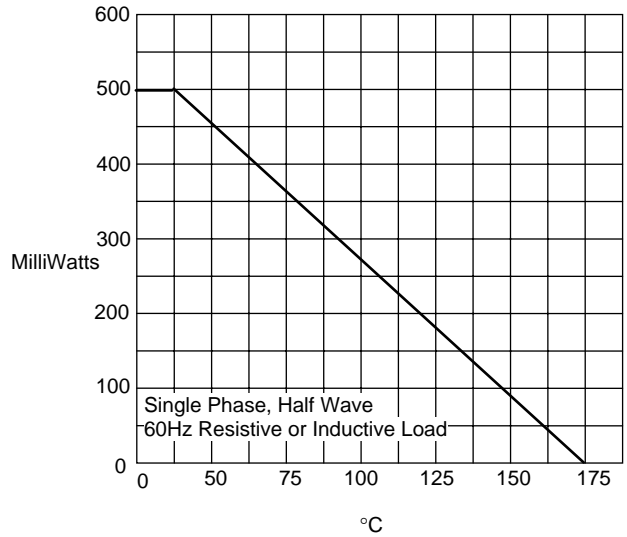
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Figure 1
Typical Forward Characteristics



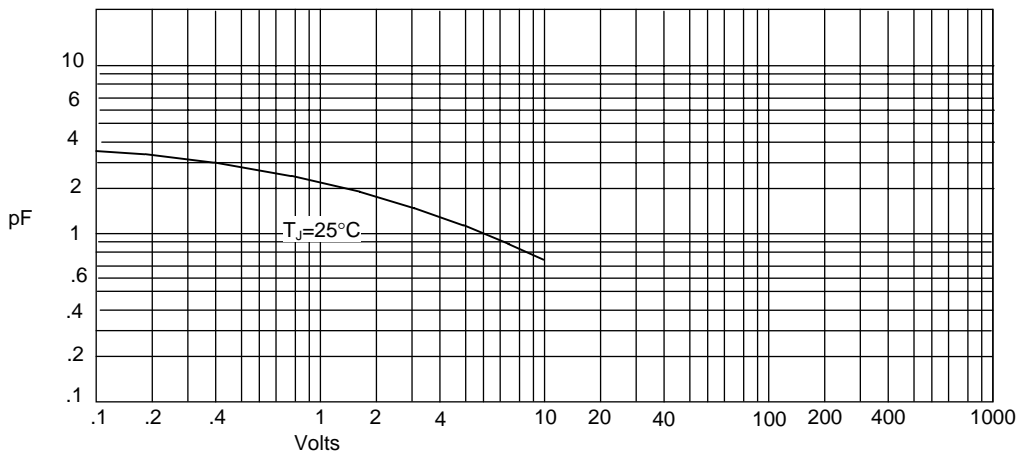
Instantaneous Forward Current - MilliAmperes versus
Instantaneous Forward Voltage - Volts

Figure 2
Power Dissipation Derating Curve



Admissible Power Dissipation - MilliWatts versus
Junction Temperature - °C

Figure 3
Junction Capacitance



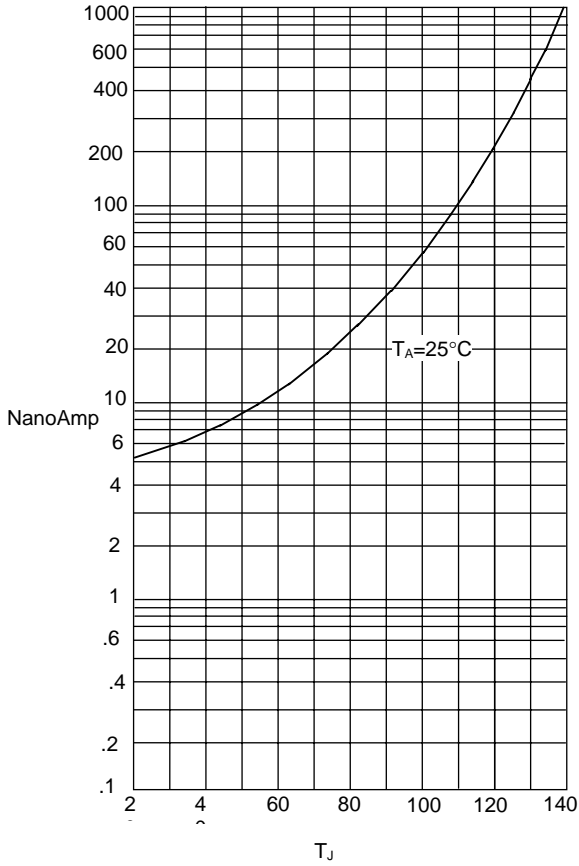
Junction Capacitance - pF versus
Reverse Voltage - Volts

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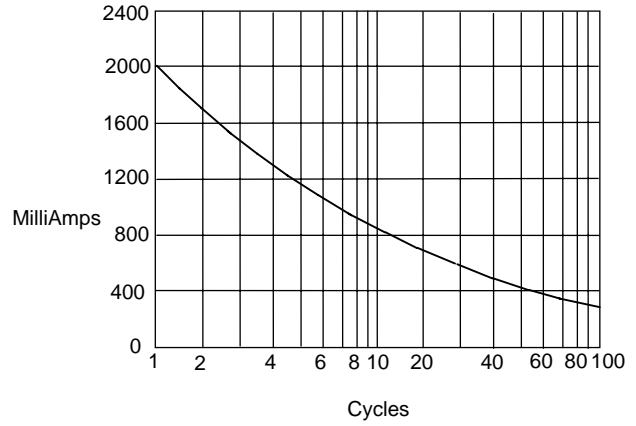
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Figure 4
Typical Reverse Characteristics



Instantaneous Reverse Leakage Current - NanoAmperes versus Junction Temperature - °C

Figure 5
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; 10Kpcs/Reel |
| (Part Number)-AP | Ammo Packing;5Kpcs/AmmoBox |
| (Part Number)-BP | Bulk;500pcs/Bag |

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