

Micro Commercial Components



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- Features
 Lead Free Finish/Rohs Compliant (Note1) ("P"Suffix designates Compliant. See ordering information) Low Current Leakage
- Metalurgically Bonded Construction
- Low Cost
- Marking: Cathode band and type number
- Moisture Sensitivity Level 1

Maximum Ratings

- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C
- Maximum Thermal Resistance; 35 °C/W Junction To Ambient

Electrical Characteristics @ 25°C Unless Otherwise Specified

| Reverse Voltage | V_R | 75V | |
|--------------------|------------------|------------|--------------------------|
| Peak Reverse | V_{RM} | 100V | |
| Voltage | | | |
| Average Rectified | Io | 150mA | Resistive Load |
| Current | | | f >= 50Hz |
| Power Dissipation | P _{TOT} | 500mW | |
| Junction | T_J | 150°C | |
| Temperature | | | |
| Peak Forward Surge | I _{FSM} | 500mA | t<1s |
| Current | | | |
| Instantaneous | V_{F} | 1.0V(MAX) | I _{FM} = 100mA; |
| | VF | , , | |
| Forward Voltage | | 0.62-0.72V | $I_{FM} = 5.0 \text{mA}$ |
| Maximum DC | | | V _R =20Volts |
| Reverse Current At | I_{R} | 25nA | $T_J = 25^{\circ}C$ |
| Rated DC Blocking | | 50μΑ | T _J = 150°C |
| Voltage | | 5uA | V _R =75Volts |
| Typical Junction | С | 4pF | Measured at |
| Capacitance | | - | 1.0MHz, V_R =4.0V |
| Reverse Recovery | T _{rr} | 4nS | I _F =10mA |
| Time | | | $V_R = 6V$ |
| | | | $R_L=100\Omega$ |

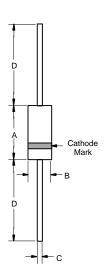
^{*}Pulse test: Pulse width 300 µsec, Duty cycle 2%

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

1N4448

500mW 100Volt **Switching Diode**

DO-35



| DIMENGIONO | | | | | | | | |
|------------|--------|------|-------|------|------|--|--|--|
| DIMENSIONS | | | | | | | | |
| | INCHES | | ММ | | | | | |
| DIM | MIN | MAX | MIN | MAX | NOTE | | | |
| Α | | .166 | | 4.2 | | | | |
| В | | .079 | | 2.00 | | | | |
| C | | .020 | | .52 | | | | |
| D | 1.000 | | 25.40 | | | | | |

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Figure 1
Typical Forward Characteristics



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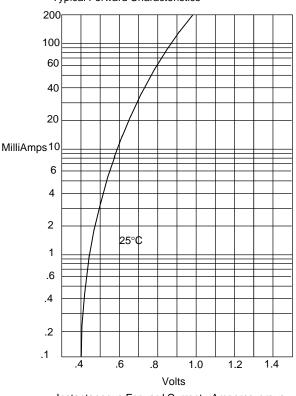
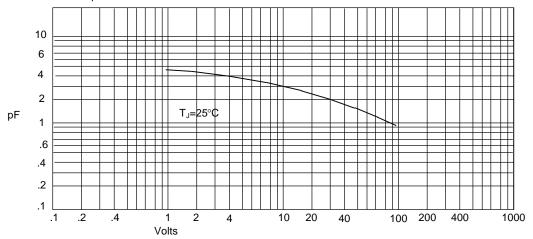


Figure 2 Forward Derating Curve 600 500 400 300 MilliWatts 200 100 Single Phase, Half Wave 60Hz Resistive or Inductive Load 75 100 125 150 175 $^{\circ}\text{C}$

Admissable Power Dissipation - MilliWattsversus Ambient Temperature -°C

Instantaneous Forward Current - Amperes*versus* Instantaneous Forward Voltage - Volts

Figure 3
Junction Capacitance

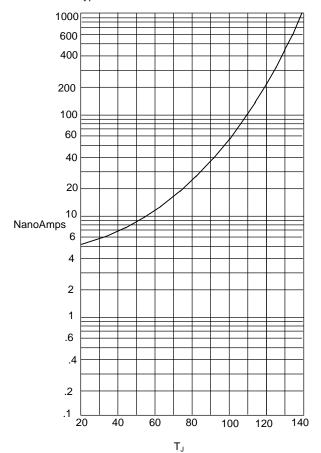


Junction Capacitance - pF*versus* Reverse Voltage - Volts

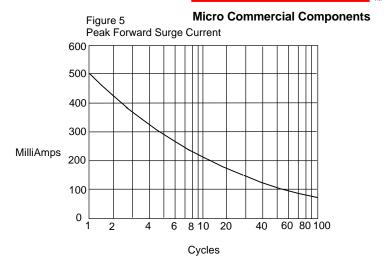
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·*M*·*C*·*C*·

Figure 4
Typical Reverse Characteristics



Instantaneous Reverse Leakage Current - NanoAmperesersus Junction Temperature -°C



Peak Forward Surge Current - Amperesversus 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/Ammo Box | |
| Part Number-BP | Bulk: 100Kpcs/Carton | |

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