



Micro Commercial Components
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1N914(A)(B)

500mW 100 Volt Silicon Epitaxial Diodes

Features

- Low Current Leakage
- Compression Bond Construction
- Low Cost

Maximum Ratings

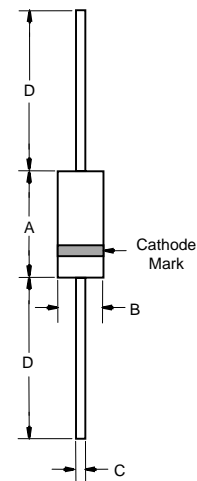
- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C
- Maximum Thermal Resistance; 300°C/W Junction To Ambient

Electrical Characteristics @ 25°C Unless Otherwise Specified

| | | | |
|---------------------------------------|-----------|-----------------------|--|
| Maximum Repetitive Reverse Voltage | V_{RRM} | 100V | |
| Average Rectified Forward Current | I_O | 200mA | |
| Power Dissipation | P_D | 500mW | |
| Junction Temperature | T_J | 150°C | |
| Peak Forward Surge Current | I_{FSM} | 1.0A 4.0A | Pulse Width=1.0 second Pulse Width=1.0 microsecond |
| Minimum Breakdown Voltage | V_R | 100V 75V | $I_R=100\mu A$, $I_R=5.0\mu A$ |
| Maximum Instantaneous Forward Voltage | V_F | 1.0V 720mV | $T_J = 25^\circ C$ $I_{FM} = 10mA$; $I_{FM} = 20mA$; $I_{FM} = 100mA$; $I_{FM} = 5.0mA$; |
| Maximum Reverse Current | I_R | 25nA 5.0uA 50uA | $V_R=20V, T_J=25^\circ C$, $V_R=75V, T_J=25^\circ C$, $V_R=20V, T_J=150^\circ C$ |
| Typical Junction Capacitance | C_J | 4.0pF | Measured at 1.0MHz, $V_R=0V$ |
| Reverse Recovery Time | T_{rr} | 4.0nS | $I_F=10mA$ $V_R = 6V$ $R_L=100 \Omega, I_{rr}=1.0mA$ |

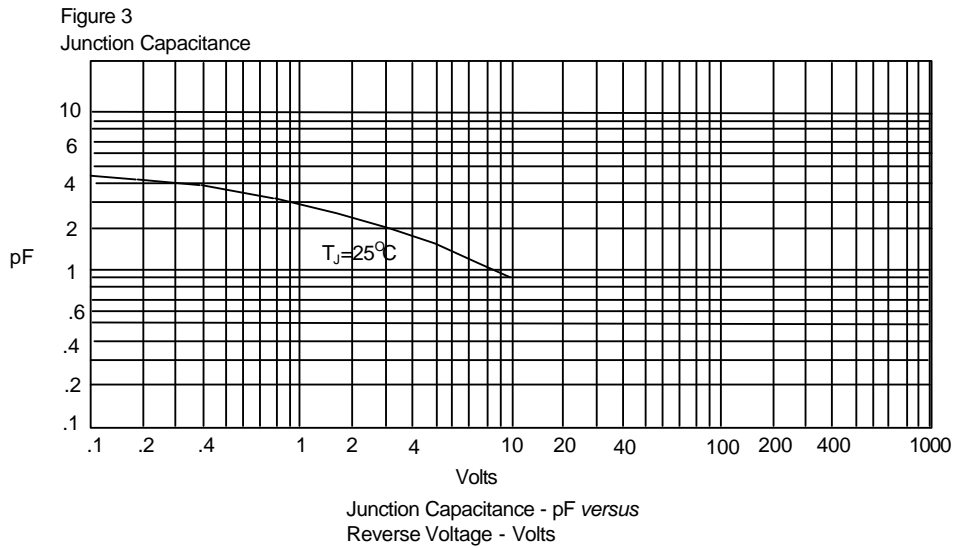
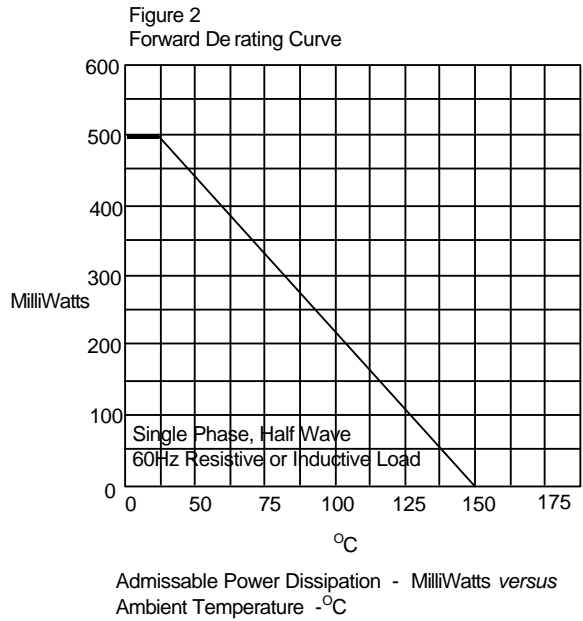
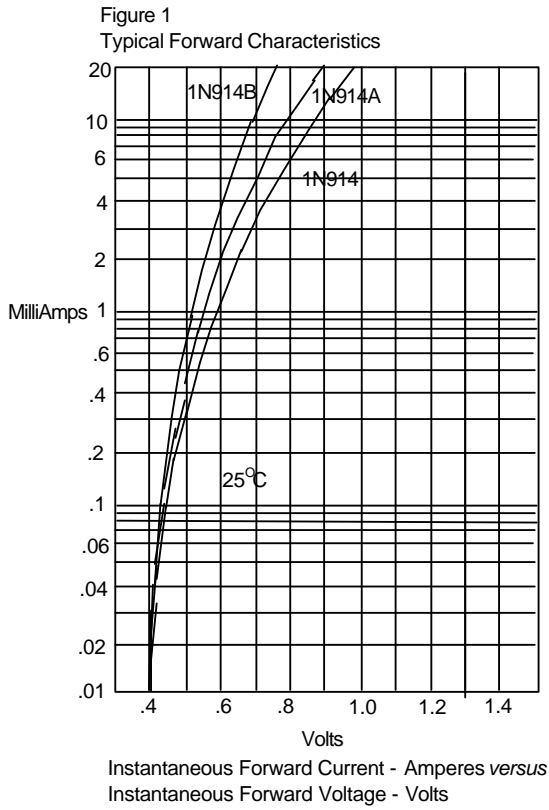
*Pulse test: Pulse width 300 usec, Duty cycle 2%

DO-35



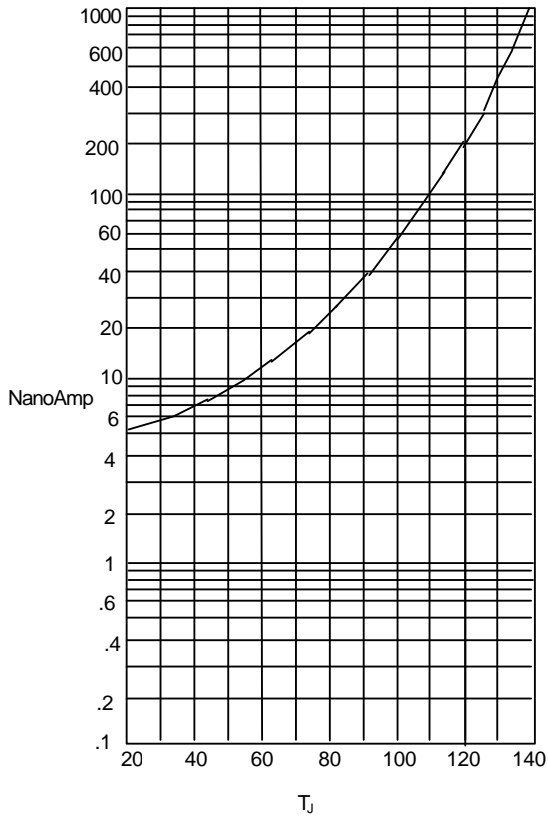
| DIM | DIMENSIONS | | | | NOTE |
|-----|------------|------|-------|------|------|
| | INCHES | | MM | | |
| | MIN | MAX | MIN | MAX | |
| A | --- | .166 | --- | 4.2 | |
| B | --- | .079 | --- | 2.00 | |
| C | --- | .020 | --- | .52 | |
| D | 1.000 | --- | 25.40 | --- | |

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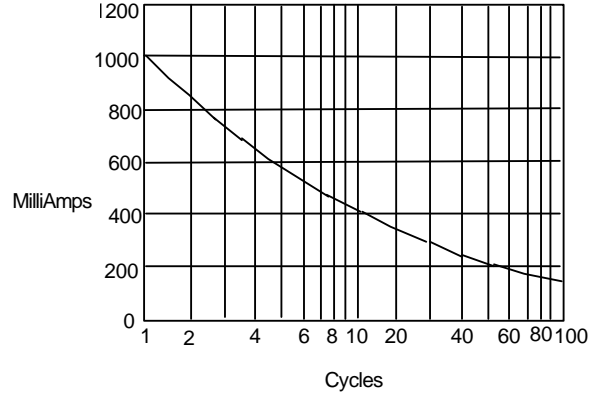
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Figure 4
Typical Reverse Characteristics



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