FEATURES

- MICROMINIATURE PACKAGE
- VOILESS HERMETICALLY SEALED GLASS PACKAGE
- TRIPLE LAYER PASSIVATION
- METALLURGICALLY BONDED
- FAST RECOVERY
- PIV TO 1000 VOLTS
- JAN/TX/TXV TYPES AVAILABLE PER MIL-S-19500/359

MAXIMUM RATINGS

Operating Temperature: -65°C to +175°C
Storage Temperature: -65°C to +200°C
Power Dissipation: (A) 3 Amp/MIL-STD-750 (See Figure 2)
             (B) 1 Amp/no heat sink @ +55°C

ELECTRICAL CHARACTERISTICS

<table>
<thead>
<tr>
<th>TYPE</th>
<th>PEAK INVERSE VOLTAGE (MAX.) PIV</th>
<th>BREAKDOWN VOLTAGE (MIN.) BV = 500 V</th>
<th>AVERAGE RECTIFIED CURRENT Io</th>
<th>FORWARD VolTaGE (MAX.) Vp = 1 A</th>
<th>REVERSE CURRENT (MAX.) Ip = PIV</th>
<th>CAPACITANCE (MAX.) C = 12 F</th>
<th>SURGE CURRENT (MAX.) Ip (SURGE) (NOTE 1)</th>
<th>REVERSE RECOVERY TIME (MAX.) (NOTE 2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>JAN 1N4942</td>
<td>200</td>
<td>220</td>
<td>1.0</td>
<td>.750</td>
<td>1.3</td>
<td>1.0</td>
<td>200</td>
<td>45</td>
</tr>
<tr>
<td>JAN 1N4944</td>
<td>400</td>
<td>440</td>
<td>1.0</td>
<td>.750</td>
<td>1.3</td>
<td>1.0</td>
<td>200</td>
<td>35</td>
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<tr>
<td>JAN 1N4946</td>
<td>600</td>
<td>660</td>
<td>1.0</td>
<td>.750</td>
<td>1.3</td>
<td>1.0</td>
<td>200</td>
<td>25</td>
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<tr>
<td>JAN 1N4947</td>
<td>800</td>
<td>880</td>
<td>1.0</td>
<td>.750</td>
<td>1.3</td>
<td>1.0</td>
<td>200</td>
<td>25</td>
</tr>
<tr>
<td>JAN 1N4948</td>
<td>1000</td>
<td>1100</td>
<td>1.0</td>
<td>.750</td>
<td>1.3</td>
<td>1.0</td>
<td>200</td>
<td>15</td>
</tr>
</tbody>
</table>

NOTE 1: T_A = 100°C, f = 60 Hz, I_o = 750mA, 10-8 m sec. surges @ 1/minute.

NOTE 2: I_F = 0.5A, I_Rm = 1A, iR(REC) = .250A

MECHANICAL CHARACTERISTICS

CASE: Hermetically sealed glass case.
LEAD MATERIAL: Tinned copper.
MARKING: Body painted, alpha numeric.
Polarity: Cathode band.
Thermal Resistance From Junction To Heat Sink $ \Theta_s = 30^\circ C/W$ Max.

\[
P_{\text{max}} = \frac{T_J - T_s}{\Theta_s} \quad P_{\text{max}} = \text{Max. Continuous Dissipation, Watts}
\]
\[
T_J = \text{Max. Junction Temp.} = 175^\circ C
\]
\[
T_s = \text{Heat Sink Temp}
\]

**FIGURE 2**

MIL STD 750 METHOD 1026 (A)

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**FIGURE 3**

MAXIMUM FORWARD CURRENT
vs AMBIENT TEMPERATURE
This datasheet has been download from:

www.datasheetcatalog.com

Datasheets for electronics components.