Features

- Fast switching for high efficiency
- For surface mounted applications
- Glass passivated chip
- Low reverse leakage current
- Low forward voltage drop
- High current capability
- Plastic material has UL flammability classification 94V-0

Mechanical Data

- Case: Molded plastic
- Polarity: Indicated by cathode band
- Weight: 0.002 ounce, 0.064 gram

Maximum Ratings and Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.
Single phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Symbols</th>
<th>GROAA</th>
<th>GROBA</th>
<th>GRODA</th>
<th>GROGA</th>
<th>GROJA</th>
<th>GROKA</th>
<th>GROMA</th>
<th>Units</th>
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<tbody>
<tr>
<td>Maximum repetitive peak reverse voltage</td>
<td>V_{\text{max}}</td>
<td>50</td>
<td>100</td>
<td>200</td>
<td>400</td>
<td>600</td>
<td>800</td>
<td>1000</td>
<td>Volts</td>
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<tr>
<td>Maximum RMS voltage</td>
<td>V_{\text{rms}}</td>
<td>35</td>
<td>70</td>
<td>140</td>
<td>280</td>
<td>420</td>
<td>560</td>
<td>700</td>
<td>Volts</td>
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<tr>
<td>Maximum DC blocking voltage</td>
<td>V_{\text{dc}}</td>
<td>50</td>
<td>100</td>
<td>200</td>
<td>400</td>
<td>600</td>
<td>800</td>
<td>1000</td>
<td>Volts</td>
</tr>
<tr>
<td>Maximum average forward rectified current</td>
<td>I_{\text{av}}</td>
<td>@ T_{\text{j}}=90°C</td>
<td>1.5</td>
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<td>Amps</td>
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<tr>
<td>Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)</td>
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<td>Amps</td>
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<tr>
<td>Maximum forward voltage at 1.5A DC</td>
<td>V_{f}</td>
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<td>Volts</td>
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<tr>
<td>Maximum DC reverse current at rated DC blocking voltage</td>
<td>I_{\text{r}}</td>
<td>@T_{\text{j}}=25°C</td>
<td>5.0</td>
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<td>μA</td>
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<td></td>
<td>@T_{\text{j}}=125°C</td>
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<td>Maximum reverse recovery time (Note 1)</td>
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<td>ns</td>
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<td>Typical junction capacitance (Note 2)</td>
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<td>pF</td>
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<td>Typical thermal resistance (Note 3)</td>
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<td>°C/W</td>
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<td>°C</td>
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<td>Storage temperature range</td>
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<td>°C</td>
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</table>

Notes:
1. Reverse Recovery Test Conditions: I_{\text{i}}=0.5A, I_{\text{rm}}=1.0A, I_{\text{rr}}=0.25A
2. Measured at 1.0MHz and applied reverse voltage of 4.0V D.C.
3. Thermal Resistance Junction to Lead
RATINGS AND CHARACTERISTIC CURVES

FIG. 1 - FORWARD CURRENT DERATING CURVE

AVERAGE FORWARD CURRENT AMPERES

LEAD TEMPERATURE, °C

FIG. 2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

PEAK FORWARD SURGE CURRENT AMPERES

NUMBER OF CYCLES AT 60Hz

SINGLE PHASE HALF WAVE 60Hz RESISTIVE OR INDUCTIVE LOAD

Pulse Width 8.3 ms
Single Half-Sine-Wave
(JEDEC METHOD)

FIG. 3 - TYPICAL FORWARD CHARACTERISTICS

INSTANTANEOUS FORWARD CURRENT (A)

INSTANTANEOUS FORWARD VOLTAGE, VOLTS

TJ = 25°C

PULSEWIDTH 300us

FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

INSTANTANEOUS REVERSE CURRENT (UA)

PERCENT OF RATED PEAK REVERSE VOLTAGE (%)

TJ = 125°C

TJ = 25°C