Designer’s Data Sheet

Part Number/Ordering Information

SPD

Screening

= Not Screened
TX = TX Level
TXV = TXV
S = S Level

Voltage
3889 = 50V
3890 = 100V
3891 = 200V
3892 = 300V
3893 = 400V

Features:
- Fast Recovery: 120nsec Maximum
- Higher Voltage Devices Available
- Low Reverse Leakage Current
- Single Chip Construction
- PIV to 400 Volts
- Hermetically Sealed
- High Surge Rating
- Low Thermal Resistance
- For Reverse Polarity add suffix “R”
- TX, TXV, and Space Level Screening Available

Maximum Ratings

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Value</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>V_RRM</td>
<td>50</td>
<td>Volts</td>
</tr>
<tr>
<td>V_RWM</td>
<td>100</td>
<td>Volts</td>
</tr>
<tr>
<td>V_R</td>
<td>200</td>
<td>Volts</td>
</tr>
<tr>
<td>I_FSM</td>
<td>300</td>
<td>Volts</td>
</tr>
<tr>
<td>400</td>
<td></td>
<td>Volts</td>
</tr>
</tbody>
</table>

Average Rectified Forward Current
(Resistive Load, 60 Hz, Sine Wave, T_A = 25 °C)

I_o 12 Amps

Peak Surge Current
(8.3 ms Pulse, Half Sine Wave, T_A = 25 °C)

I_FSM 200 Amps

Operating & Storage Temperature
T_OP & T_STG -65 to +150 °C

Maximum Thermal Resistance
(Junction to Case)
R_ΘJC 2.5 °C/W

DO-4

NOTE: All specifications are subject to change without notification.
SCD's for these devices should be reviewed by SSDI prior to release.

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## Electrical Characteristics

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Value</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>( V_F )</td>
<td>1.3</td>
<td>( V_{DC} )</td>
</tr>
<tr>
<td>( V_F )</td>
<td>1.45</td>
<td>( V_{DC} )</td>
</tr>
<tr>
<td>( I_R )</td>
<td>20</td>
<td>( \mu A )</td>
</tr>
<tr>
<td>( I_R )</td>
<td>2</td>
<td>( mA )</td>
</tr>
<tr>
<td>( t_{RR} )</td>
<td>120</td>
<td>( nsec )</td>
</tr>
<tr>
<td>( C_J )</td>
<td>300</td>
<td>( pF )</td>
</tr>
</tbody>
</table>

**CASE OUTLINE: DO-4**

- **CASE OUTLINE:** DO-4

**TYPICAL OPERATING CURVES**

**TA=25°C Unless otherwise specified**

![Typical Operating Curves Graph](image)

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