## Power Schottky Rectifier

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Conditions</th>
<th>Maximum Ratings</th>
</tr>
</thead>
<tbody>
<tr>
<td>$I_{\text{RMS}}$</td>
<td>$T_C = 160^\circ \text{C}$; rectangular, $d = 0.5$</td>
<td>20 A</td>
</tr>
<tr>
<td>$I_{\text{FAV}}$</td>
<td>$T_{\text{VJ}} = 45^\circ \text{C}$; $t_p = 10 \text{ ms (50 Hz), sine}$</td>
<td>6 A</td>
</tr>
<tr>
<td>$I_{\text{SM}}$</td>
<td>$I_{\text{AS}} = 1 \text{ A}; L = 100 \mu \text{H}; T_{\text{VJ}} = 25^\circ \text{C}$; non repetitive</td>
<td>80 A</td>
</tr>
<tr>
<td>$E_{\text{AS}}$</td>
<td>$V_{\text{AS}} = 1 \text{ A}$; $L = 100 \mu \text{H}$; $T_{\text{VJ}} = 25^\circ \text{C}$; non repetitive</td>
<td>0.05 mJ</td>
</tr>
<tr>
<td>$I_{\text{AR}}$</td>
<td>$V_{\text{A}} = 1.5 \times V_{\text{RMS}}$ typ.; $f = 10 \text{ kHz}$; repetitive</td>
<td>0.1 A</td>
</tr>
<tr>
<td>$(d\text{v}/dt)_{\text{cr}}$</td>
<td></td>
<td>18 kV/µs</td>
</tr>
<tr>
<td>$T_{\text{VJ}}$</td>
<td>$-55...+175^\circ \text{C}$</td>
<td></td>
</tr>
<tr>
<td>$T_{\text{TJM}}$</td>
<td>175 °C</td>
<td></td>
</tr>
<tr>
<td>$T_{\text{Stg}}$</td>
<td>$-55...+150^\circ \text{C}$</td>
<td></td>
</tr>
<tr>
<td>$P_{\text{tot}}$</td>
<td>$T_{\text{C}} = 25^\circ \text{C}$</td>
<td>50 W</td>
</tr>
<tr>
<td>Weight</td>
<td>typical $0.3 \text{ g}$</td>
<td></td>
</tr>
</tbody>
</table>

### Features
- International standard package
- Very low $V_F$
- Extremely low switching losses
- Low $I_{\text{RMS}}$-values
- Epoxy meets UL 94V-0

### Applications
- Rectifiers in switch mode power supplies (SMPS)
- Free wheeling diode in low voltage converters

### Advantages
- High reliability circuit operation
- Low voltage peaks for reduced protection circuits
- Low noise switching
- Low losses

### Dimensions see Outlines.pdf

### Pulse test:
- Pulse Width $= 5 \text{ ms}$, Duty Cycle $< 2.0 \%$

Data according to IEC 60747 and per diode unless otherwise specified

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