

Schottky Rectifier Module Type 160 A

 $V_{RRM} = 180 \text{ V}$
 $I_{F(AV)} = 160 \text{ A}$

Features

- High Surge Capability
- Type 180 V V_{RRM}
- Isolation Type Package
- Electrically Isolated Base Plate
- Not ESD Sensitive


SOT-227 Package


Maximum ratings

| Parameter | Symbol | Conditions | Value | Unit |
|--|-----------|------------|------------|------|
| Maximum recurrent peak reverse voltage | V_{RRM} | | 180 | V |
| Maximum DC blocking voltage | V_{DC} | | 180 | V |
| Maximum RMS Voltage | V_{RMS} | | 126 | V |
| Operating temperature | T_j | | -40 to 150 | °C |
| Storage temperature | T_{stg} | | -40 to 150 | °C |

Electrical characteristics at 25 °C, unless otherwise specified

| Parameter | Symbol | Conditions | Value | Unit |
|--|-------------|---|-------|------|
| Average forward current (per pkg) | $I_{F(AV)}$ | $T_C = 110 \text{ °C}$ | 160 | A |
| Peak forward surge current (per leg) | I_{FSM} | 8.3 ms, half sine | 900 | A |
| Maximum instantaneous forward voltage* (per leg) | V_F | $I_{FM} = 80 \text{ A}, T_j = 25 \text{ °C}$ | 0.92 | V |
| | | $I_{FM} = 80 \text{ A}, T_j = 125 \text{ °C}$ | 0.80 | V |
| Maximum instantaneous reverse current at rated DC blocking voltage (per leg) | I_R | $T_j = 25 \text{ °C}$ | 3 | mA |
| | | $T_j = 100 \text{ °C}$ | 10 | mA |
| | | $T_j = 150 \text{ °C}$ | 30 | mA |
| Isolation voltage | V_{ISO} | A.C. 1 minute | 2500 | V |

Thermal characteristics

| | | | | |
|---|-----------------|--|------|------|
| Maximum thermal resistance junction to case (per leg) | $R_{\theta jc}$ | | 0.60 | °C/W |
|---|-----------------|--|------|------|

* Pulse Test: Pulse width 300 μs , Duty < 2 %

Figure.1 - Typical Forward Characteristics

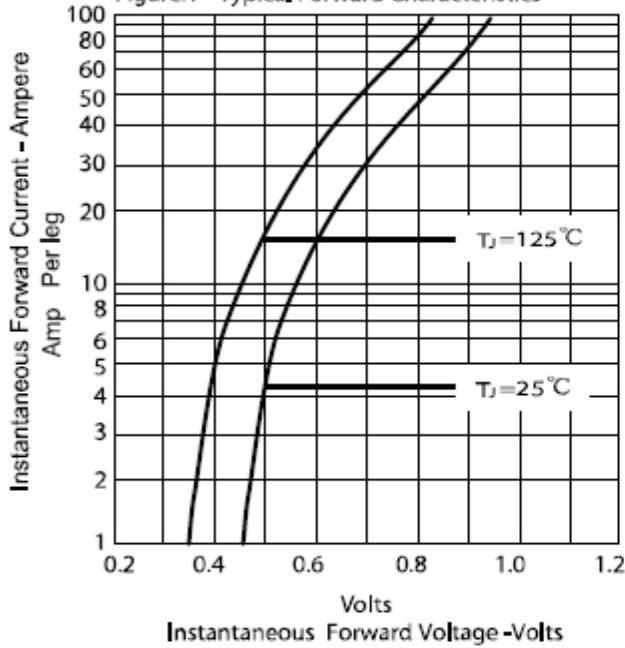


Figure .2- Forward Derating Curve

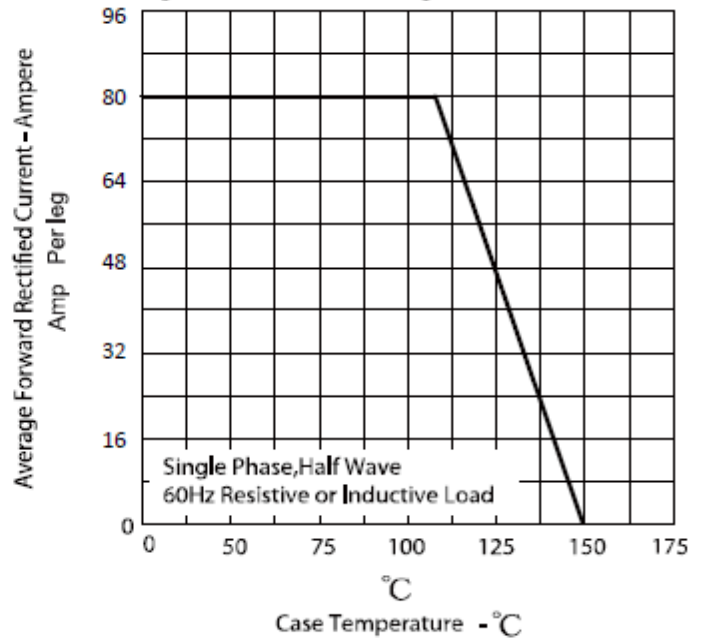


Figure.3 - Peak Forward Surge Current

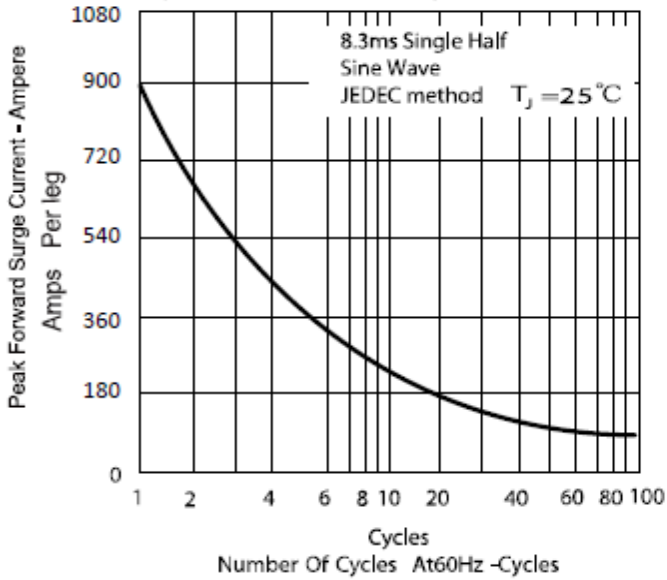
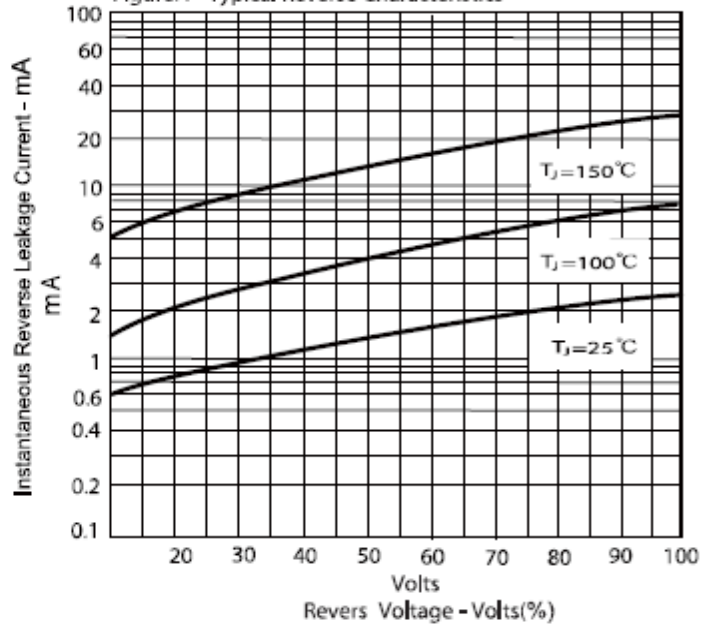


Figure.4 - Typical Reverse Characteristics



Package dimensions and terminal configuration

Product is marked with part number and terminal configuration.



| DIMENSIONS | | | | |
|------------|--------|-------|-------|-------|
| DIM | INCHES | | MM | |
| | MIN | MAX | MIN | MAX |
| A | .500 | .519 | 12.70 | 13.20 |
| B | .307 | .322 | 7.80 | 8.20 |
| C | .029 | .033 | .75 | .84 |
| D | .077 | .082 | 1.95 | 2.10 |
| E | 1.487 | 1.502 | 37.80 | 38.20 |
| F | 1.250 | 1.258 | 31.75 | 32.00 |
| G | .931 | .956 | 23.65 | 24.30 |
| H | .996 | 1.007 | 25.30 | 25.60 |
| I | .586 | .594 | 14.90 | 15.10 |
| J | .492 | .516 | 12.50 | 13.10 |
| K | .161 | .169 | 4.10 | 4.30 |
| L | .161 | .169 | 4.10 | 4.30 |
| M | .181 | .191 | 4.60 | 4.95 |
| N | .165 | .177 | 4.20 | 4.50 |
| O | 1.184 | 1.192 | 30.10 | 30.30 |
| P | M4*8 | | | |