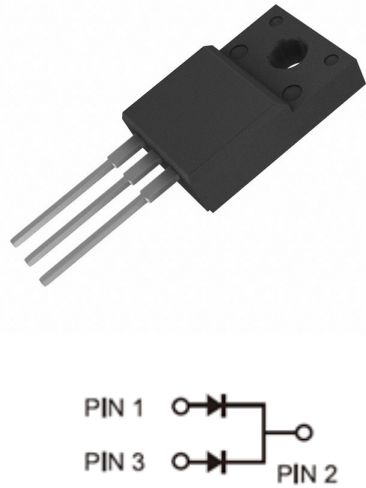


| | |
|---|---|
| <p>Trench MOS Schottky Rectifier</p> | <p>REVERSE VOLTAGE - 200 Volts FORWARD CURRENT - 10.0 Amperes</p> |
| <p>FEATURES</p> <ul style="list-style-type: none"> • Low power loss, high efficiency • Low forward voltage drop • High forward surge capability • High frequency operation • Excellent high temperature stability • Trench MOS Schottky technology <p>MECHANICAL DATA</p> <ul style="list-style-type: none"> • Case: TO-220F • Polarity: As marked • Weight: Approximated 1.86 grams | <p>TO-220F</p>  <p>The image shows a TO-220F package and its pinout diagram. The package is a black plastic component with three pins. The pinout diagram shows PIN 1 and PIN 3 connected to the anodes of two diodes, and PIN 2 connected to the common cathode.</p> |

| |
|--|
| <p>MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS</p> <p>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%</p> |
|--|

| Characteristics | Symbol | Value | | Unit |
|--|----------------|-------------------------------------|--------------------------------|---------------|
| Maximum Repetitive Peak Reverse Voltage | V_{RRM} | 200 | | V |
| RMS Reverse Voltage | V_{RMS} | 140 | | V |
| Forward Voltage Drop $I_F=3A$ ($T_J=25^\circ C$) $I_F=3A$ ($T_J=125^\circ C$) $I_F=5 A$ ($T_J=25^\circ C$) $I_F=5 A$ ($T_J=125^\circ C$) | V_F | Typ. 0.82 0.6 0.95 0.65 | Max. - - 1.05 0.76 | V |
| Maximum Reverse Current at Rated V_{RRM} $T_J=25^\circ C$ $T_J=125^\circ C$ | I_R | Typ. 5 3 | Max. 50 10 | μA mA |
| Maximum Average Forward Rectified Current Total device Per diode | I_O | 10 5 | | A |
| Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method) | I_{FSM} | 80 | | A |
| Peak Repetitive Reverse Current at $t_p=2 \mu s$, 1 kHz, | I_{RRM} | 1.0 | | A |
| Operating and Storage Temperature Range | T_J, T_{STG} | -65 to +150 | | $^\circ C$ |

Rating and Characteristic Curves

FIG. 1 MAXIMUM FORWARD CURRENT DERATING CURVE

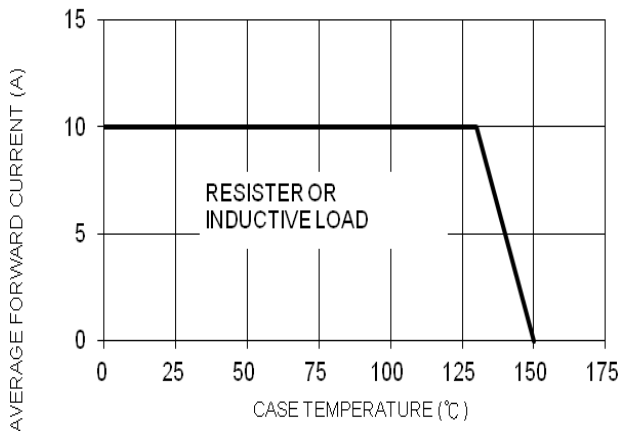


FIG. 2 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER LEG

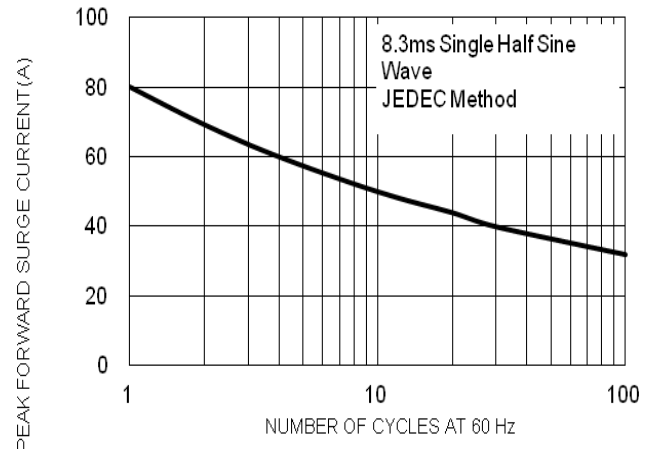


FIG. 3 TYPICAL FORWARD CHARACTERISTICS PER LEG

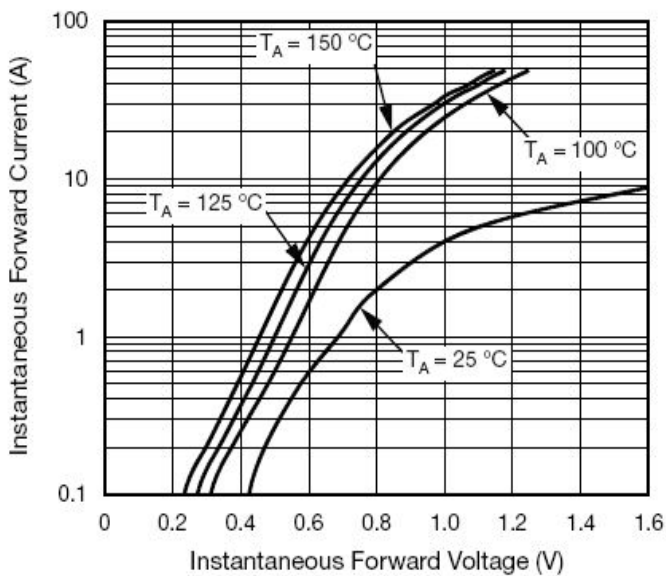


FIG. 4 TYPICAL REVERSE CHARACTERISTICS PER LEG

