## Schottky Barrier Rectifiers

Using the Schottky Barrier principle with a Refractory metal capable of high temperature operation metal. proprietary barrier technology allows for reliable operation up to 150℃ junction temperature. Typical application are in switching Mode Power Supplies such as adaptors, DC/DC converters free-wheeling and polarity protection diodes.

**SCHOTTKY BARRIER RECTIFIERS**

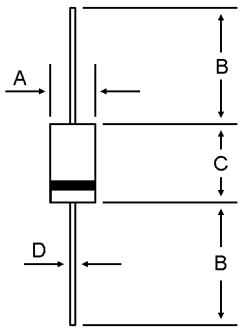
**2.0 AMPERES 200 VOLTS**

**DO-15**

### Features

- ＊Low Forward Voltage.
- ＊Low Switching noise.
- ＊High Current Capacity
- ＊Guarantee Reverse Avalanche.
- ＊Guard-Ring for Stress Protection.
- ＊Low Power Loss & High efficiency.
- ＊150℃ Operating Junction Temperature
- ＊Low Stored Charge Majority Carrier Conduction.
- ＊Plastic Material used Carries Underwriters Laboratory Flammability Classification 94V-O
- ＊Moisture Sensitivity Level: MSL-1

＊*In compliance with EU RoHs 2002/95/EC directives*
The marking is indicated by part no. with “M”. ex SR2200M




| DIM | MILLIMETERS | |
|---|---|---|
| | MIN | MAX |
| A | 2.60 | 3.60 |
| B | 25.40 | --- |
| C | 5.80 | 7.60 |
| D | 0.70 | 0.90 |

CASE---
Transfer molded plastic

POLARITY---
Cathode indicated polarity band

## MAXIMUM RATINGS

| Characteristic | Symbol | SR2200 | Unit |
|---|---|---|---|
| Peak Repetitive Reverse Voltage<br>Working Peak Reverse Voltage<br>DC Blocking Voltage | $V_{RRM}$<br>$V_{RWM}$<br>$V_R$ | 200 | V |
| RMS Reverse Voltage | $V_{R(RMS)}$ | 140 | V |
| Average Rectifier Forward Current | $I_O$ | 2.0 | A |
| Non-Repetitive Peak Surge Current (Surge applied at rate load conditions halfware, single phase, 60Hz) | $I_{FSM}$ | 50 | A |
| Operating and Storage Junction Temperature Range | $T_J$ , $T_{STG}$ | -65 to +150 | ℃ |

## ELECTRIAL CHARACTERISTICS

| Characteristic | Symbol | SR2200 | Unit |
|---|---|---|---|
| Maximum Instantaneous Forward Voltage<br>( $I_F$ =2.0 Amp.) | $V_F$ | 0.95 | V |
| Maximum Instantaneous Reverse Current<br>( Rated DC Voltage, $T_C$ = 25℃ )<br>( Rated DC Voltage, $T_C$ = 125℃ ) | $I_R$ | 0.01<br>10 | mA |
| Maximum Thermal Resistance Junction to case | $R_{\theta JC}$ | 55 | ℃/W |
| Typical Junction Capacitance<br>( Reverse Voltage of 4 volts & f=1 MHz ) | $C_P$ | 80 | pF |

# SR2200

FIG-1 FORWARD CURRENT DERATING CURVE

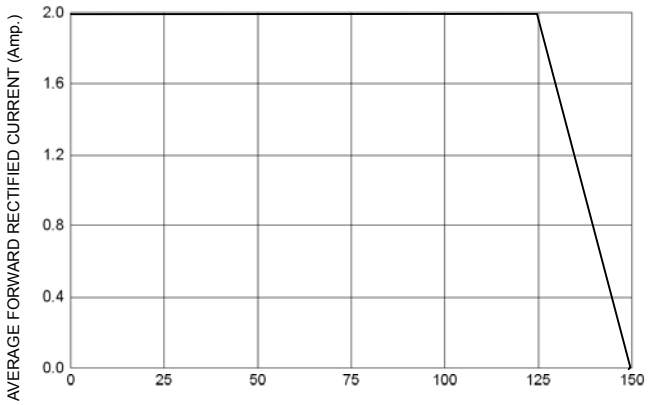



FIG-2 TYPICAL FORWARD CHARACTERISITICS

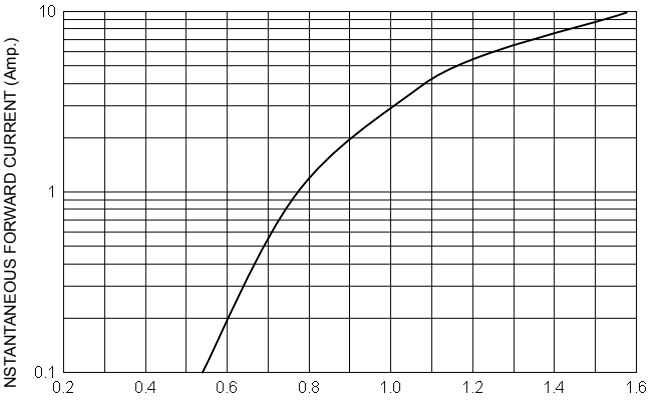



FIG-3 TYPICAL REVERSE CHARACTERISTICS

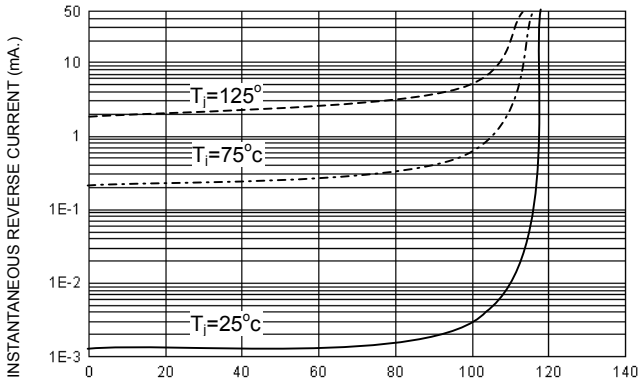



FIG-4 TYPICAL JUNCTION CAPACITANCE

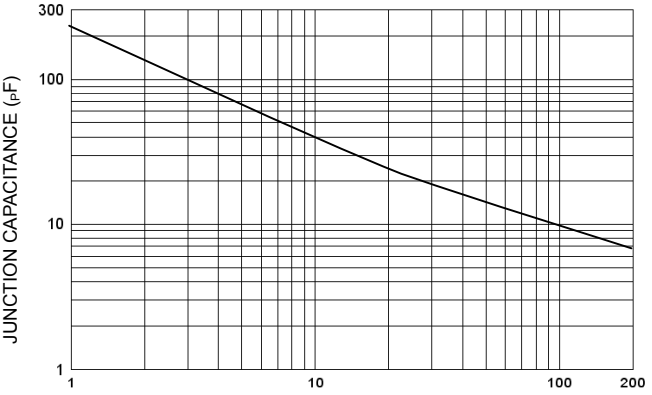



FIG-5 PEAK FORWARD SURGE CURRENT