

**SURFACE MOUNT FAST RECOVERY  
GLASS PASSIVATED RECTIFIERS**

REVERSE VOLTAGE - **50 to 1000** Volts  
FORWARD CURRENT - **2.0** Amperes

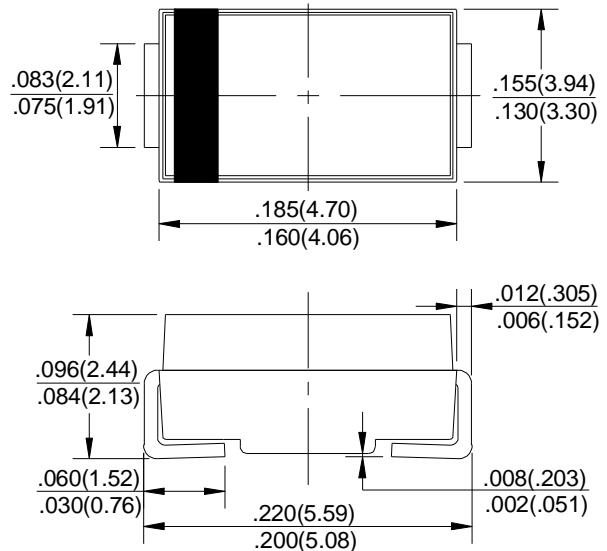
**FEATURES**

- Fast switching for high efficiency
- Low cost
- Diffused junction
- Low reverse leakage current
- Low forward voltage drop
- High current capability
- The plastic material carries UL recognition 94V-0

**MECHANICAL DATA**

- Case: Molded Plastic
- Polarity: Color band denotes cathode
- Weight: 0.003 ounces, 0.093 grams
- Mounting position: Any

**SMB**



Dimensions in inches and (millimeters)

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave ,60Hz, resistive or inductive load.

For capacitive load, derate current by 20%

| CHARACTERISTICS  | SYMBOL | RS2A        | RS2B | RS2D | RS2G | RS2J | RS2K | RS2M | UNIT |
|--|--------|-------------|------|------|------|------|------|------|------|
| Maximum Recurrent Peak Reverse Voltage   | VRRM   | 50          | 100  | 200  | 400  | 600  | 800  | 1000 | V    |
| Maximum RMS Voltage  | VRMS   | 35          | 70   | 140  | 280  | 420  | 560  | 700  | V    |
| Maximum DC Blocking Voltage  | VDC    | 50          | 100  | 200  | 400  | 600  | 800  | 1000 | V    |
| Maximum Average Forward Rectified Current @TA=75 °C  | I(AV)  | 2.0         |      |      |      |      |      |      | A    |
| Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load(JEDEC Method) | IFSM   | 60          |      |      |      |      |      |      | A    |
| Peak Forward Voltage at 2.0A DC  | VF     | 1.3         |      |      |      |      |      |      | V    |
| Maximum DC Reverse Current @TJ=25°C at Rated DC Blocking Voltage @TJ=100°C                       | IR     | 5.0<br>100  |      |      |      |      |      |      | µA   |
| Maximum Reverse Recovery Time(Note 1)  | Trr    | 150         |      |      |      | 250  | 500  |      | nS   |
| Typical Junction Capacitance (Note2)   | CJ     | 30          |      |      |      | 20   |      |      | pF   |
| Typical Thermal Resistance (Note3)   | RθJA   | 25          |      |      |      |      |      |      | °C/W |
| Operating Temperature Range  | TJ     | -55 to +150 |      |      |      |      |      |      | °C   |
| Storage Temperature Range  | TSTG   | -55 to +150 |      |      |      |      |      |      | °C   |

NOTES: 1.Measured with IF=0.5A,IR=1A,IRR=0.25A

2.Measured at 1.0 MHz and applied reverse voltage of 4.0V DC

3.Thermal resistance junction to ambient.

FIG. 1 – FORWARD CURRENT DERATING CURVE

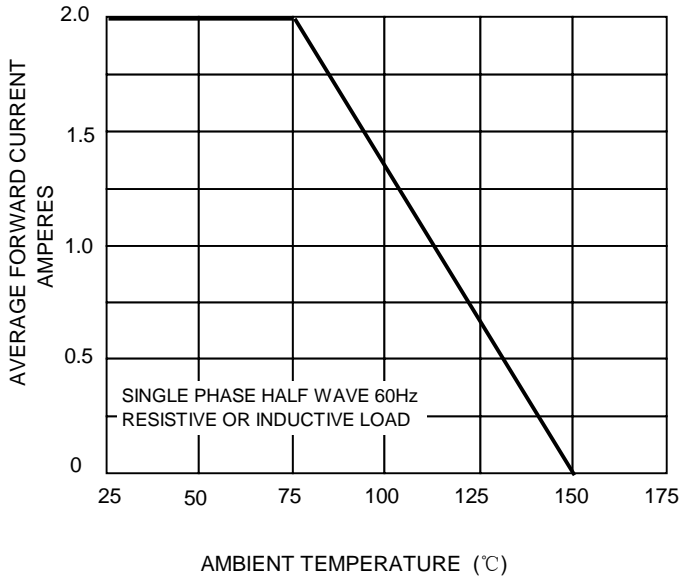


FIG. 2 – MAXIMUM NON-REPETITIVE SURGE CURRENT

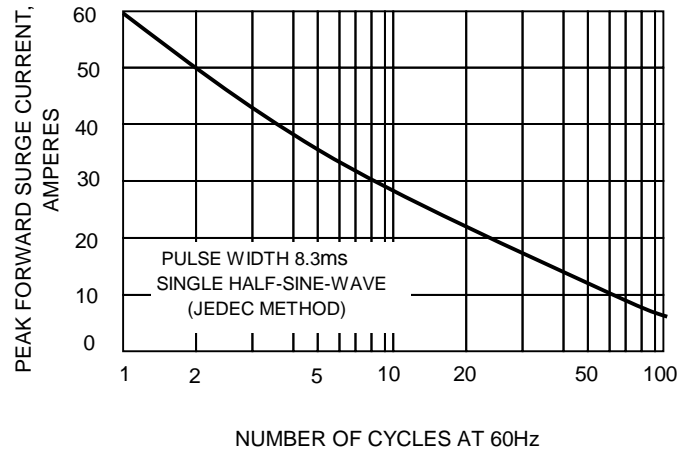


FIG.3 – TYPICAL JUNCTION CAPACITANCE

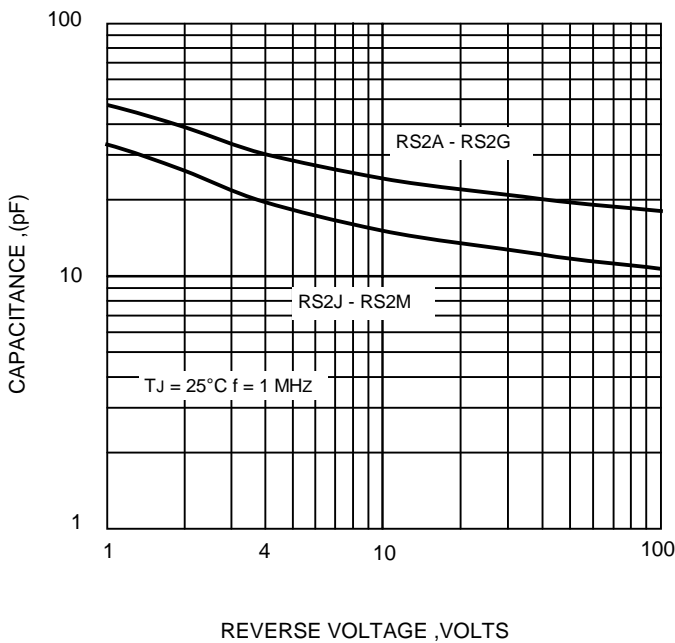


FIG.4-TYPICAL FORWARD CHARACTERISTICS

