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|--|---|
| <b>SURFACE MOUNT<br/>SCHOTTKY BARRIER RECTIFIERS</b> | <b>REVERSE VOLTAGE - 20 to 100 Volts<br/>FORWARD CURRENT - 1.0 Ampere</b> |
|--|---|

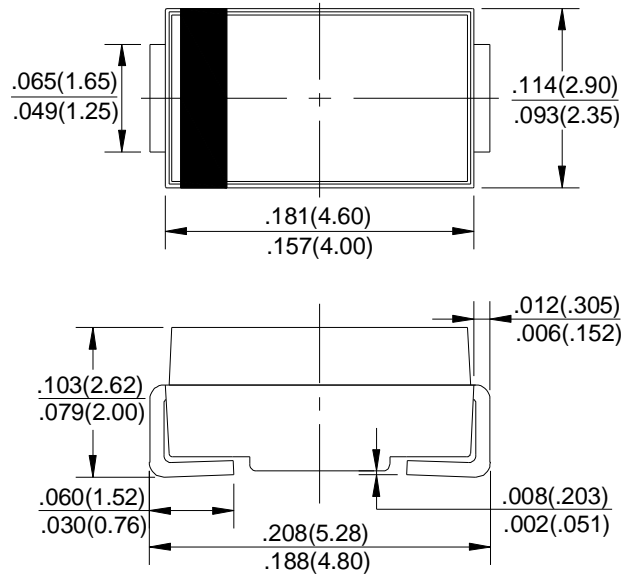
### FEATURES

- For surface mounted applications
- Metal-Semiconductor junction with guarding
- Epitaxial construction
- Very low forward voltage drop
- High current capability
- Plastic material has UL flammability classification 94V-0
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications.

### MECHANICAL DATA

- Case: Molded Plastic
- Polarity: Indicated by cathode band
- Weight: 0.002 ounces, 0.053 grams

### SMA



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                         | SS12         | SS13 | SS14 | SS15 | SS16 | SS18 | SS110 | UNIT |
|---|--------------------------------|--------------|------|------|------|------|------|-------|------|
| Maximum Recurrent Peak Reverse Voltage  | V <sub>RRM</sub>               | 20           | 30   | 40   | 50   | 60   | 80   | 100   | V    |
| Maximum RMS Voltage   | V <sub>RMS</sub>               | 14           | 21   | 28   | 35   | 42   | 56   | 70    | V    |
| Maximum DC Blocking Voltage   | V <sub>DC</sub>                | 20           | 30   | 40   | 50   | 60   | 80   | 100   | V    |
| Maximum Average Forward Rectified Current @T <sub>L</sub> =100 °C                                       | I <sub(av)< sub=""></sub(av)<> | 1.0          |      |      |      |      |      |       | A    |
| Peak Forward Surge Current<br>8.3ms Single Half Sine-Wave<br>Super Imposed On Rated Load (JEDEC Method) | I <sub>FSM</sub>               | 30           |      |      |      |      |      |       | A    |
| Maximum Forward Voltage at 1.0A DC  | V <sub>F</sub>                 | 0.55         |      |      | 0.70 |      | 0.85 |       | V    |
| Maximum DC Reverse Current @T <sub>J</sub> =25°C<br>at Rated DC Blocking Voltage @T <sub>J</sub> =100°C | I <sub>R</sub>                 | 1.0<br>10    |      |      |      |      |      |       | mA   |
| Typical Junction Capacitance (Note1)  | C <sub>J</sub>                 | 110          |      |      |      |      |      |       | pF   |
| Typical Thermal Resistance (Note2)  | R <sub>θJL</sub>               | 20           |      |      |      |      |      |       | °C/W |
| Operating Temperature Range   | T <sub>J</sub>                 | -55 to + 150 |      |      |      |      |      |       | °C   |
| Storage Temperature Range   | T <sub>STG</sub>               | -55 to + 150 |      |      |      |      |      |       | °C   |

NOTES:1.Measured at 1.0 MHz and applied reverse voltage of 4.0V DC.  
 2.Thermal resistance junction to lead.

FIG. 1 - FORWARD CURRENT DERATING CURVE

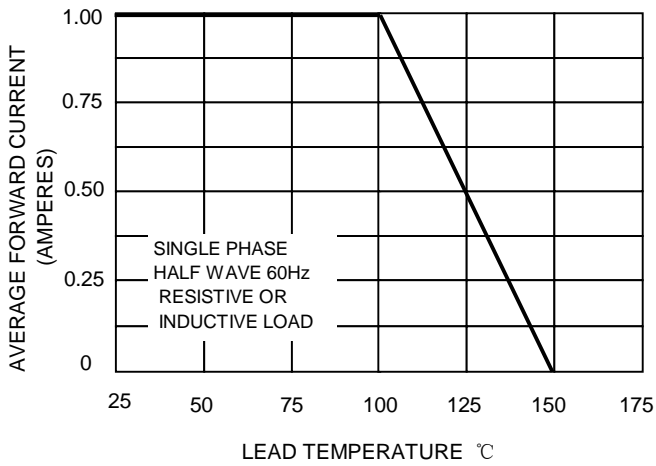


FIG. 2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

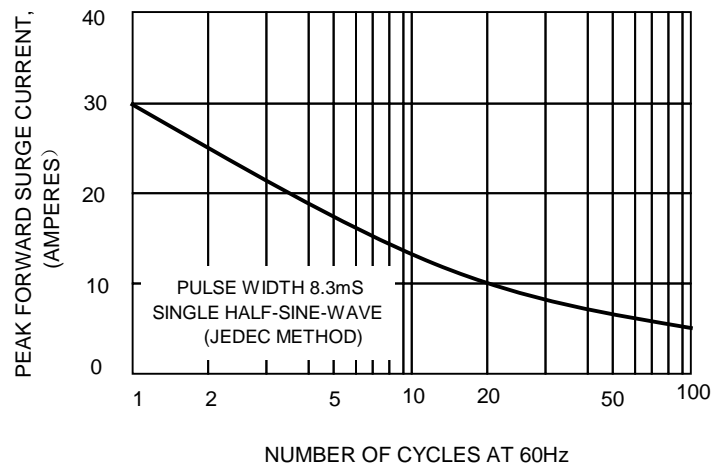


FIG.3-TYPICAL FORWARD CHARACTERISTICS

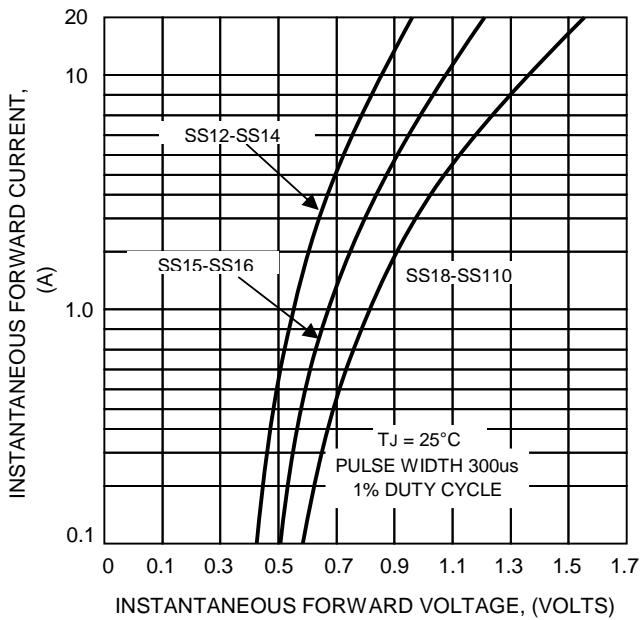


FIG.4-TYPICAL JUNCTION CAPACITANCE

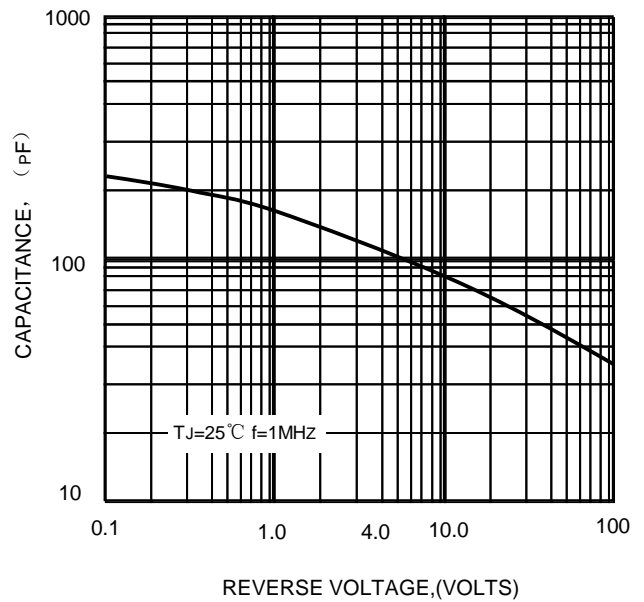


FIG.5-TYPICAL REVERSE CHARACTERISTICS

