

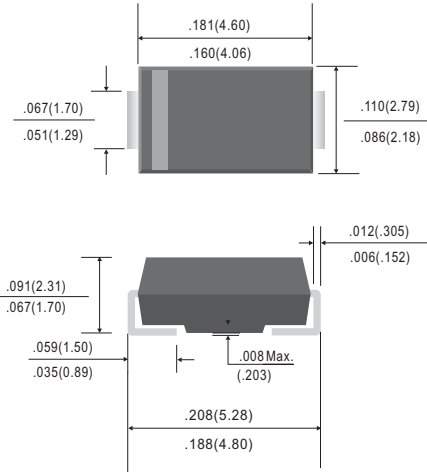


1.0AMP SCHOTTKY BARRIER RECTIFIERS

SMA PACKAGE

FEATURES

- * Ideal for surface mounted applications
- * Low leakage current
- * Metallurgically bonded construction
- * High reliability
- * RoHS product for packing code suffix "G"
- Halogen free product for packing code suffix "H"



Dimensions in inches and (millimeters)

MECHANICAL DATA

- * Case: Molded plastic
- * Epoxy: UL 94V-O rate flame retardant
- * Mounting position: Any
- * Weight: 0.066 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

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

For capacitive load, derate current by 20%

| RATINGS | SYMBOL | SS12 | SS13 | SS14 | SS15 | SS16 | SS18 | SS110 | SS115 | SS120 | UNIT |
|---|------------------|-------------|------|------|------|------|------|-------|-------|-------|-------|
| Marking Code | | SS12 | SS13 | SS14 | SS15 | SS16 | SS18 | SS110 | SS115 | SS120 | |
| Maximum Recurrent Peak Reverse Voltage | V _{RRM} | 20 | 30 | 40 | 50 | 60 | 80 | 100 | 150 | 200 | Volts |
| Maximum RMS Voltage | V _{RMS} | 14 | 21 | 28 | 35 | 42 | 56 | 70 | 105 | 140 | Volts |
| Maximum DC Blocking Voltage | V _{DC} | 20 | 30 | 40 | 50 | 60 | 80 | 100 | 150 | 200 | Volts |
| Maximum Average Forward Rectified Current | I _O | 1.0 | | | | | | | | | Amps |
| Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method) | I _{FSM} | 30.0 | | | | | | | | | Amps |
| Typical Thermal Resistance | R _{θJA} | 70 | | | | | | | | | °C/W |
| | R _{θJC} | 30 | | | | | | | | | °C/W |
| Typical Junction Capacitance (Note 1) | C _J | 70 | | | 60 | | | 50 | | 35 | pF |
| Operating Temperature Range | T _J | -55 to +125 | | | | | | | | | °C |
| Storage Temperature Range | T _{STG} | -55 to +150 | | | | | | | | | °C |

| CHARACTERISTICS | SYMBOL | SS12 | SS13 | SS14 | SS15 | SS16 | SS18 | SS110 | SS115 | SS120 | UNIT |
|------------------------------------|----------------------------|------|------|------|------|------|------|-------|-------|-------|-------|
| Maximum Forward Voltage at 1.0A DC | @TA=25°C V _F | 0.50 | | | 0.70 | | 0.85 | | 0.87 | 0.90 | Volts |
| Maximum Average Reverse Current at | @TA=25°C | 0.2 | | | | | | | | | mAmps |
| Rated DC Blocking Voltage | @TA=100°C | 5.0 | | | | | | | | | |

Note : 1.Measured at 1 MHz and applied reverse voltage of 4.0 volts.

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FIG. 1-TYPICAL FORWARD CURRENT DERATING CURVE

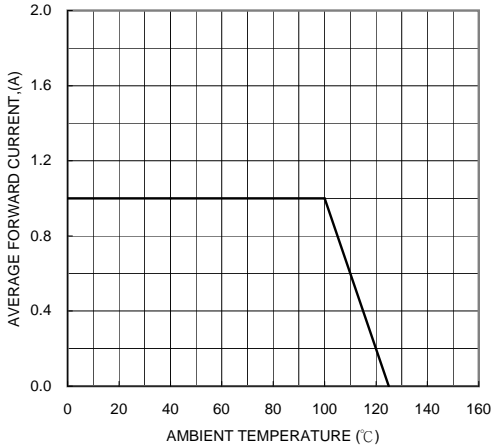


FIG. 2-TYPICAL FORWARD CHARACTERISTICS

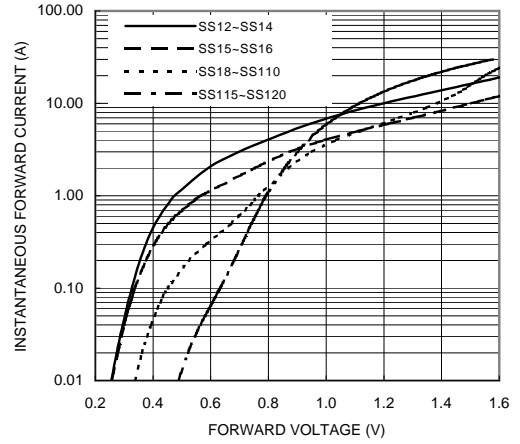


FIG. 3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

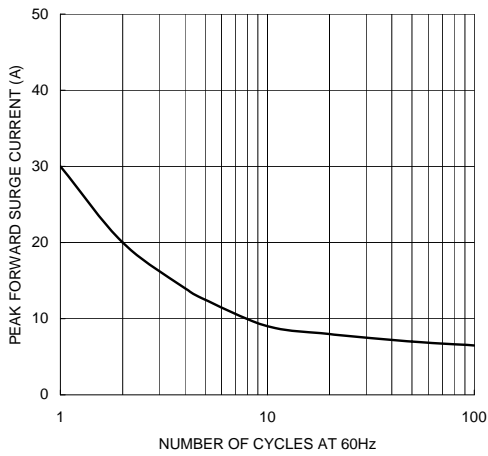


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

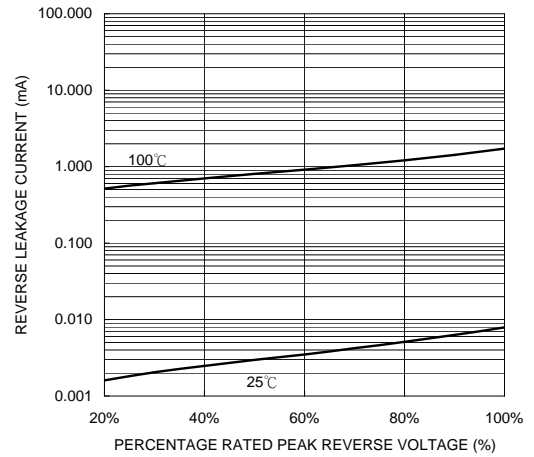


FIG. 5-TYPICAL JUNCTION CAPACITANCE

