

**SURFACE MOUNT
SCHOTTKY BARRIER RECTIFIERS**

REVERSE VOLTAGE - **70 to 100** Volts
FORWARD CURRENT - **1.0** Ampere

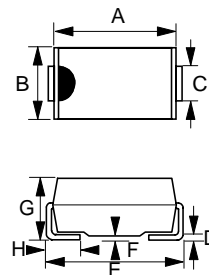
FEATURES

- For surface mounted applications
- Metal-Semiconductor junction with guardring
- 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, 0.064 grams

SMA



| SMA | | |
|------------------------------|------|------|
| DIM. | MIN. | MAX. |
| A | 4.06 | 4.57 |
| B | 2.29 | 2.92 |
| C | 1.27 | 1.63 |
| D | 0.15 | 0.31 |
| E | 4.83 | 5.59 |
| F | 0.05 | 0.20 |
| G | 2.01 | 2.62 |
| H | 0.76 | 1.52 |
| All Dimensions in millimeter | | |

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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%

| CHARACTERISTICS | SYMBOL | B170 | B180 | B190 | B1100 | UNIT |
|--|-------------------|--------------|------|------|-------|------|
| Maximum Recurrent Peak Reverse Voltage | V _{RRM} | 70 | 80 | 90 | 100 | V |
| Maximum RMS Voltage | V _{RMS} | 49 | 56 | 63 | 70 | V |
| Maximum DC Blocking Voltage | V _{DC} | 70 | 80 | 90 | 100 | V |
| Maximum Average Forward Rectified Current @T _L =100°C | I _(AV) | 1.0 | | | | A |
| Peak Forward Surge Current 8.3ms single half sine-wave super imposed on rated load (JEDEC METHOD) | I _{FSM} | 30 | | | | A |
| Maximum forward Voltage at 1.0A DC @T _J =25°C @T _J =100°C | V _F | 0.79 0.69 | | | | V |
| Maximum DC Reverse Current at Rated DC Blocking Voltage @T _J =25°C @T _J =100°C | I _R | 0.5 5.0 | | | | mA |
| Typical Junction Capacitance (Note 1) | C _J | 30 | | | | pF |
| Typical Thermal Resistance (Note 2) | R _{θJL} | 25 | | | | °C/W |
| Operating Temperature Range | T _J | -55 to +125 | | | | °C |
| Storage Temperature Range | T _{STG} | -55 to +150 | | | | °C |

NOTES : 1.Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
2.Thermal Resistance Junction to Lead.

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FIG.1 - FORWARD CURRENT DERATING CURVE

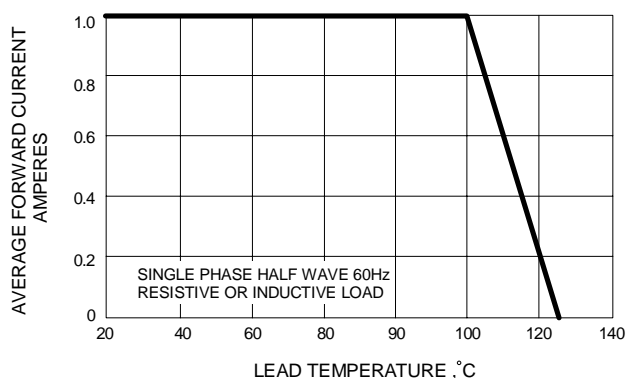


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

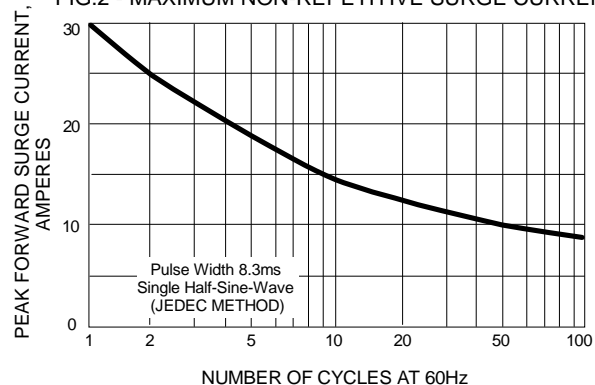


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

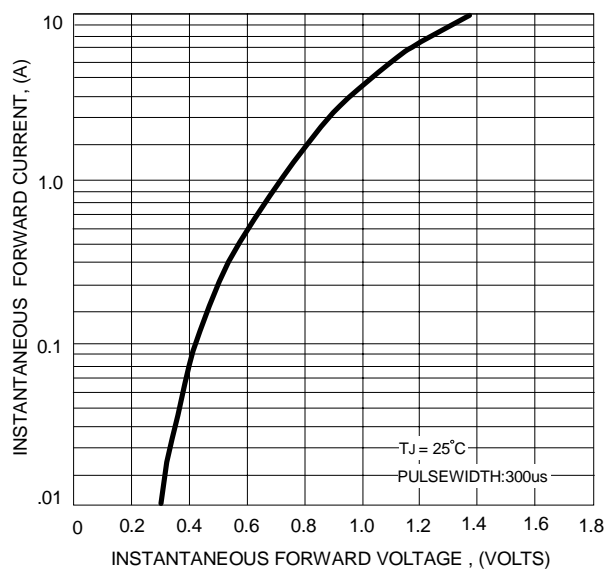


FIG.4 - TYPICAL JUNCTION CAPACITANCE

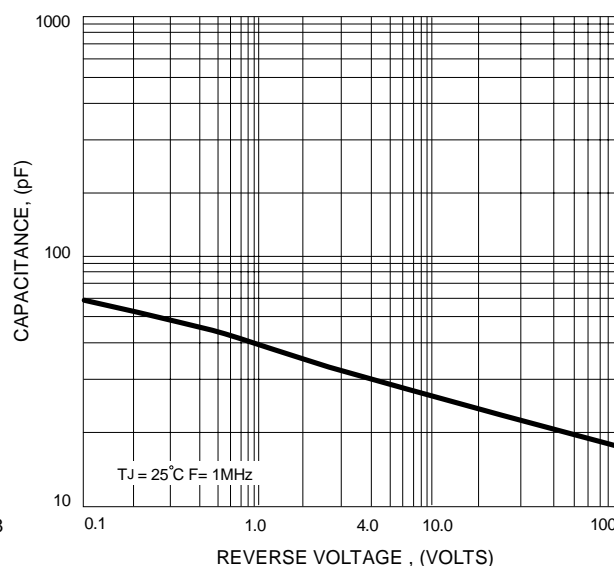


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

