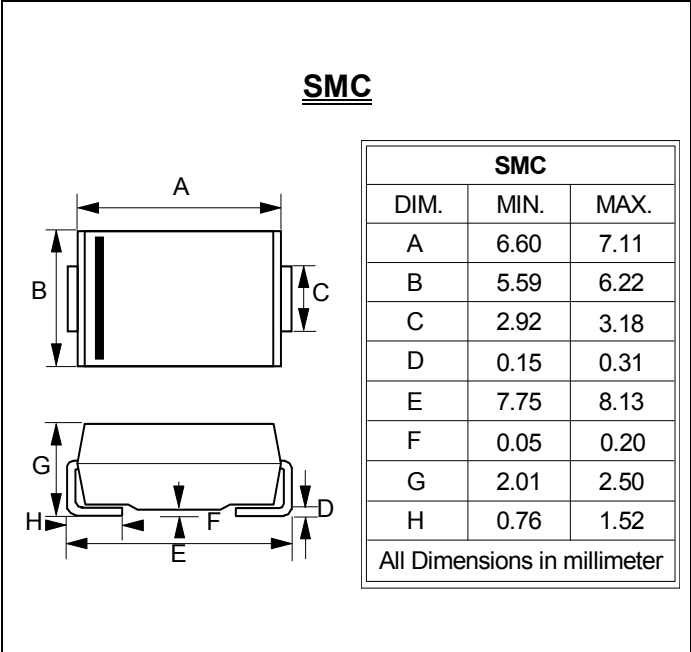


**SURFACE MOUNT
SCHOTTKY BARRIER RECTIFIERS**

REVERSE VOLTAGE - 20 to 40 Volts
FORWARD CURRENT - 3.0 Amperes

- FEATURES**
- For surface mounted application
 - Metal-Semiconductor junction with guard ring
 - Epitaxial construction
 - Very Low forward voltage drop
 - High current capability
 - For use in low voltage, high frequency inverters, free wheeling, and polarity protection application
 - IEC 61000-4-2, level 4 (ESD), > 15KV (air)
- MECHANICAL DATA**
- Case: Molded plastic
 - Case Material: Molding compound, UL Flammability classification 94V-0, (No Br. Sb. Cl.) "Halogen-free".
 - Polarity: Color band denotes cathode
 - Weight: 0.007 ounces, 0.21 grams



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS
Ratings at 25°C ambient temperature unless otherwise specified.

| CHARACTERISTICS | SYMBOL | B320 | B330 | B340 | UNIT |
|--|-----------------|-------------|------|------|--------------------|
| Maximum Repetitive Peak Reverse Voltage | V_{RRM} | 20 | 30 | 40 | V |
| Maximum RMS Voltage | V_{RMS} | 14 | 21 | 28 | V |
| Maximum DC Blocking Voltage | VDC | 20 | 30 | 40 | V |
| Maximum Average Forward Rectified Current @ $T_L=100^\circ\text{C}$ | I_{AV} | 3.0 | | | A |
| Peak Forward Surge 8.3ms single half sine-wave superimposed on rated load | I_{FSM} | 100 | | | A |
| Maximum Forward Voltage at 3.0A DC | V_F | 0.5 | | | V |
| Maximum DC Reverse Current at Rated DC Blocking Voltage @ $T_j=25^\circ\text{C}$ @ $T_j=100^\circ\text{C}$ | I_R | 0.15 15 | | | mA |
| Typical Junction Capacitance (Note 1) | C_j | 230 | | | pF |
| Typical Thermal Resistance (Note 2, 4) | $R_{\theta JL}$ | 18 | | | $^\circ\text{C/W}$ |
| Typical Thermal Resistance (Note 3, 4) | $R_{\theta JA}$ | 60 | | | $^\circ\text{C/W}$ |
| Operating Junction Temperature Range | T_j | -55 to +125 | | | $^\circ\text{C}$ |
| Storage Temperature Range | T_{STG} | -55 to +150 | | | $^\circ\text{C}$ |

Note: (1) Measured at 1.0MHz and applied reverse voltage of 4.0V DC...
(2) Thermal Resistance Junction to Lead
(3) Thermal Resistance Junction to Ambient
(4) Unit mounted on glass epoxy substrate 1oz/ft² 7x5 mm copper pad.

REV.5, Aug-2014, KSHC07

**RATING AND CHARACTERISTIC CURVES
B320 thru B340**



FIG.1- FORWARD CURRENT DERATING CURVE

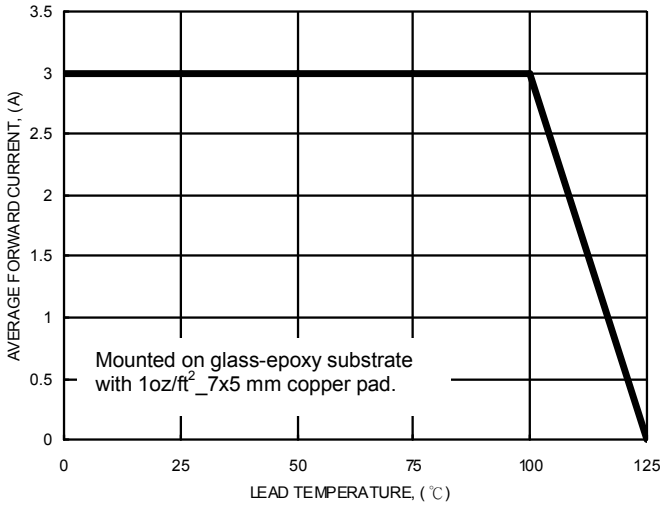


FIG.2- MAXIMUM NON-REPETITIVE SURGE CURRENT

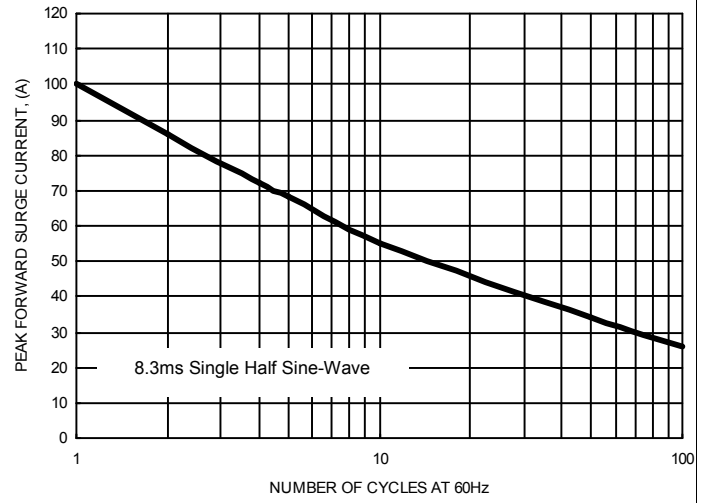


FIG.3- TYPICAL JUNCTION CAPACITANCE

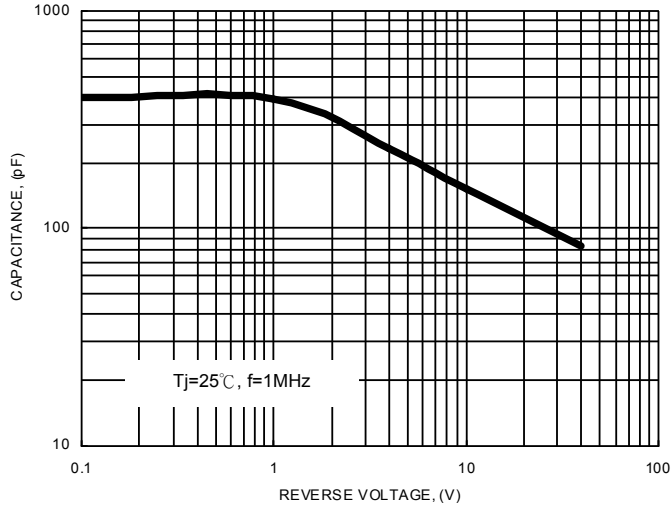


FIG.4- TYPICAL FORWARD CHARACTERISTICS

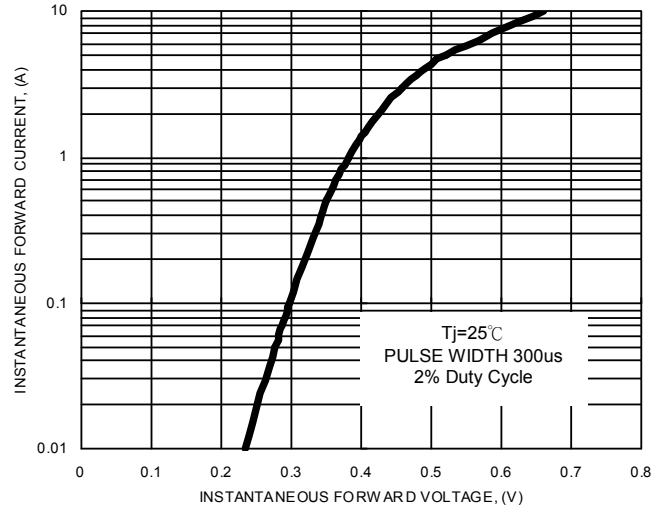


FIG.5- TYPICAL REVERSE CHARACTERISTICS

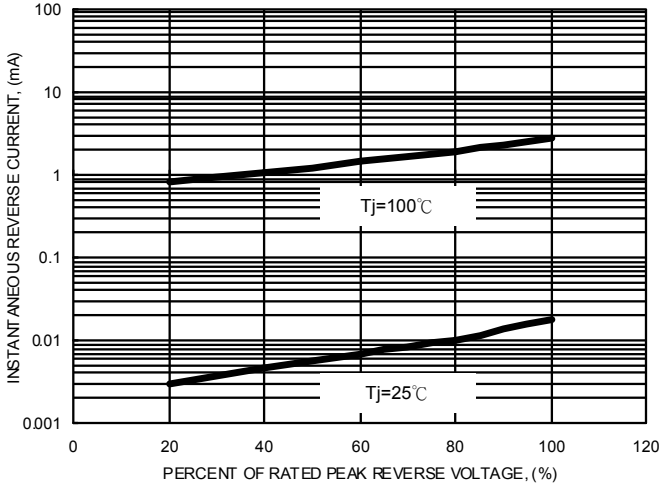
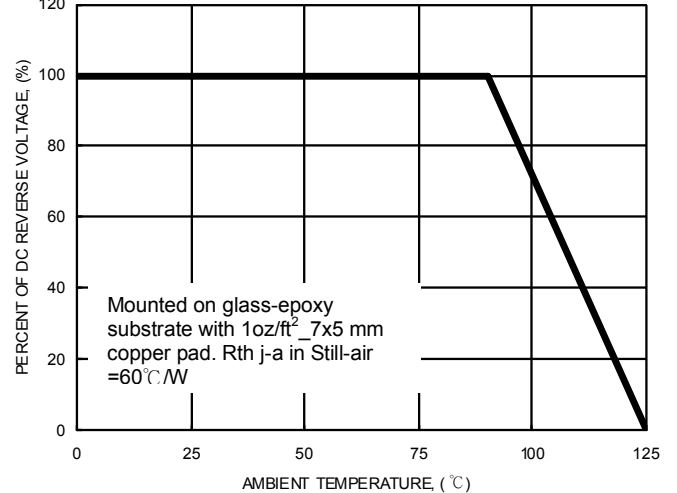


FIG.6- DC REVERSE VOLTAGE DERATING CURVE



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