

SCHOTTKY BARRIER RECTIFIER

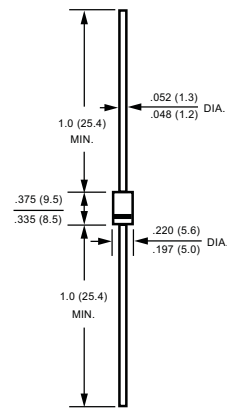
VOLTAGE RANGE 20 to 200 Volts CURRENT 3.0 Amperes

FEATURES

- * High reliability
- * Low switching loss
- * Low forward voltage drop
- * High current capability
- * High switching capability

MECHANICAL DATA

- * Epoxy: Device has UL flammability classification 94V-O
- * Case: Molded plastic
- * Lead: MIL-STD-202E method 208C guaranteed
- * Mounting: position: Any
- * Weight: 1.18 grams



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.
resistive or inductive load.

MAXIMUM RATINGS (@ TA=25 °C unless otherwise noted)

| RATINGS | SYMBOL | SR320 | SR330 | SR340 | SR350 | SR360 | SR380 | SR3100 | SR3150 | SR3200 | UNITS | |
|---|-----------------|--------------|-------|-------|-------|-------|-------|--------|--------|--------|-------|------------------|
| 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 at Derating Lead Temperature | I_O | 3.0 | | | | | | | | | | Amps |
| Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method) | I_{FSM} | 80 | | | | | | | | | | Amps |
| Typical Current Squared Time | I^2T | 26.5 | | | | | | | | | | A ² S |
| Typical Thermal Resistance (Note 1) | $R_{\theta JA}$ | 40 | | | | | | | | | | °C/W |
| | $R_{\theta JL}$ | 10 | | | | | | | | | | |
| Typical Junction Capacitance (Note 3) | C_J | 200 | | | | | | | | | | pF |
| Operating Temperature Range | T_J | 150 | | | | | | | | | | °C |
| Storage Temperature Range | T_{STG} | -55 to + 150 | | | | | | | | | | °C |

ELECTRICAL CHARACTERISTICS (@TA=25 °C unless otherwise noted)

| CHARACTERISTICS | SYMBOL | SR320 | SR330 | SR340 | SR350 | SR360 | SR380 | SR3100 | SR3150 | SR3200 | UNITS |
|--|--------|-------------------------|-------|-------|-------|-------|-------|--------|--------|--------|-------|
| Maximum Instantaneous Forward Voltage at 3.0A DC | V_F | .55 | | | .75 | | .85 | | | | Volts |
| Maximum Average Reverse Current at Rated DC Blocking Voltage | I_R | @T _A = 25°C | | 0.2 | | | | | | | mA |
| | | @T _A = 100°C | | 2 | | | | | | | mA |

- NOTES : 1. Thermal Resistance : At 9.5mm lead lengths, PCB mounted.
2. Measured at 1 MHz and applied reverse voltage of 4.0 volts.
3. "Fully ROHS compliant", "100% Sn plating (Pb-free)".

RATING AND CHARACTERISTICS CURVES (SR320 THRU SR3200)

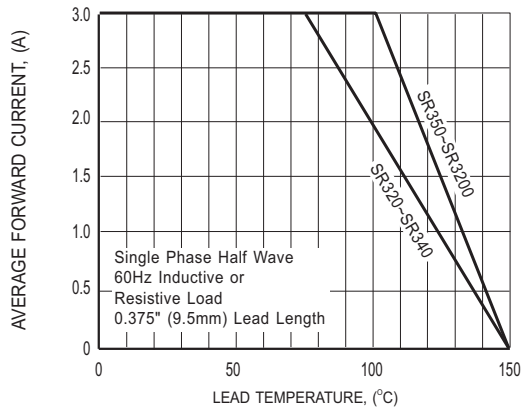


FIG.1 TYPICAL FORWARD CURRENT DERATING CURVE

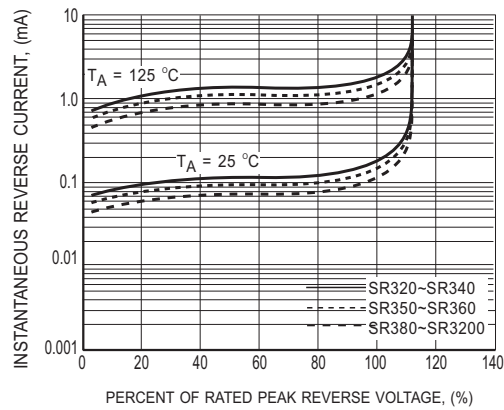


FIG.2 TYPICAL REVERSE CHARACTERISTICS

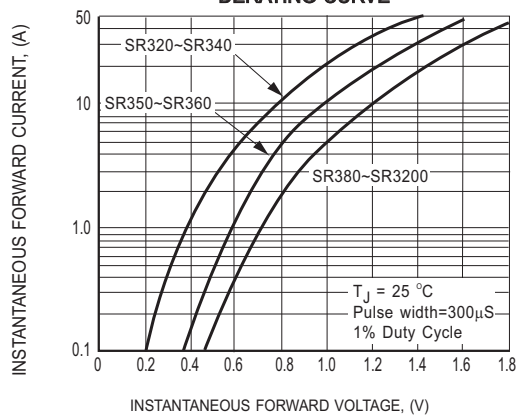


FIG.3 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

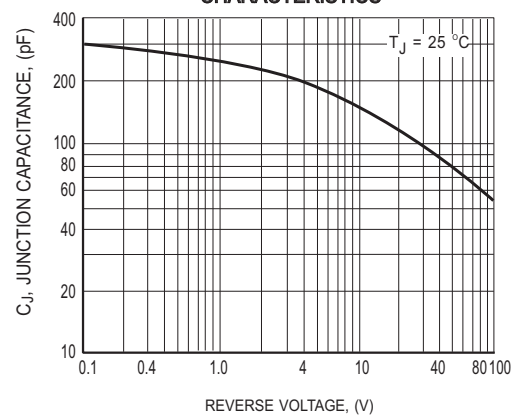


FIG.4 TYPICAL JUNCTION CAPACITANCE

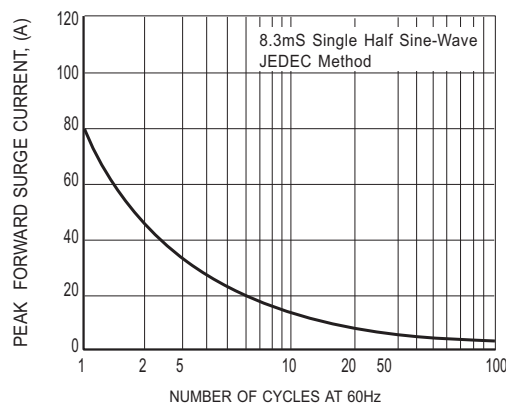
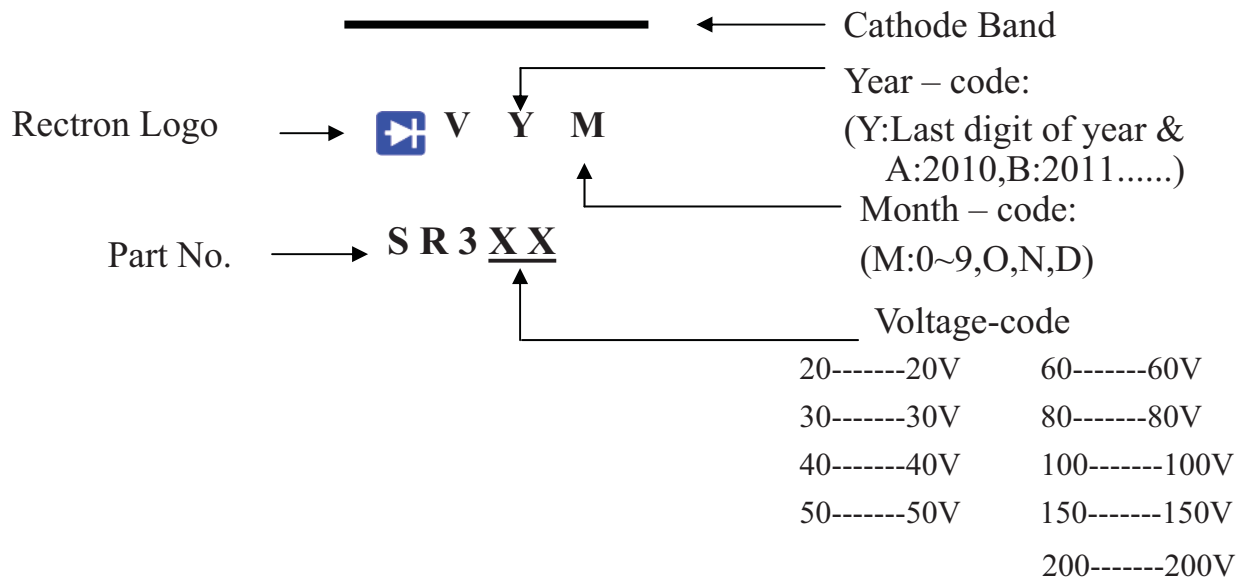


FIG.5 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

Marking Description



PACKAGING OF DIODE AND BRIDGE RECTIFIERS

BULK PACK

| PACKAGE | PACKING CODE | EA PER BOX | INNER BOX SIZE (mm) | CARTON SIZE (mm) | EA PER CARTON | GROSS WEIGHT(Kg) |
|---------|--------------|------------|---------------------|------------------|---------------|------------------|
| DO-201 | -B | 500 | 300*73*40 | 347*320*271 | 12,000 | 15.9 |

REEL PACK

| PACKAGE | PACKING CODE | EA PER REEL | EA PER INNER BOX | COMPONENT SPACE (mm) | TAPE SPACE (mm) | REEL DIA (mm) | CARTON SIZE (mm) | EA PER CARTON | GROSS WEIGHT(Kg) |
|---------|--------------|-------------|------------------|----------------------|-----------------|---------------|------------------|---------------|------------------|
| DO-201 | -T | 1,200 | 1,200 | 5.0 | 52 | 330 | 355*350*335 | 4,800 | 9.10 |

AMMO PACK

| PACKAGE | PACKING CODE | REEL (EA) | COMPONENT SPACE(mm) | TAPE SPACE (mm) | BOX SIZE (mm) | CARTON SIZE(mm) | CARTON (EA) | GROSS WEIGHT (Kg) |
|---------|--------------|-------------|---------------------|-----------------|---------------|-----------------|---------------|-------------------|
| DO-201 | -F | 600 | 9.5 | 52 | 255*73*100 | 400*268*225 | 6,000 | 9.9 |

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