

RoHS Compliant Product

A suffix of "-C" specifies halogen & lead-free

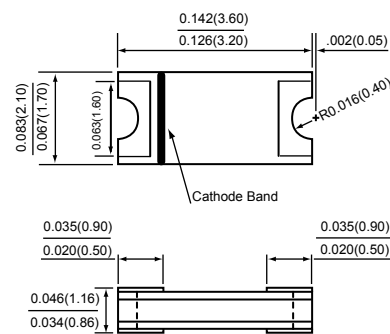
FEATURES

- * Plastic package has Underwriters Laboratory Flammability
- * Classification 94V-0
- * Low profile package
- * Built-in strain relief
- * Metal to silicon rectifier , majority carrier conduction
- * Low power loss , High efficiency
- * High current capability
- * High surge capacity
- * For using in low voltage high frequency switching power supply, inverters , free wheeling , and polarity protection applications

MECHANICAL DATA

- * Case : Packed with FRP substrate and epoxy underfilled
- * Terminals : Solder plated , solderable per MIL-STD-750, Method 2026
- * Polarity : Laser marking
- * Weight : 0.02 gram

1206



* Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating 25°C ambient temperature unless otherwise specified. Single phase half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

| TYPE NUMBER | SYMBOLS | SSCD202 | SSCD204 | SSCD206 | SSCD210 | UNITS |
|--|----------------|------------|---------|---------|---------|-------|
| Maximum Recurrent Peak Reverse Voltage | V_{RRM} | 20 | 40 | 60 | 100 | V |
| Working Peak Reverse Voltage | V_{RMS} | 20 | 40 | 60 | 100 | V |
| Maximum DC Blocking Voltage | V_{DC} | 20 | 40 | 60 | 100 | V |
| Maximum Average Forward Rectified Current (See FIG. 1) | $I_{(AV)}$ | 2.0 | | | | A |
| Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method) | I_{FSM} | 40 | | | | A |
| Maximum Instantaneous Forward Voltage at 2.0A (Note 1) | V_F | 0.50 | | 0.70 | 0.85 | V |
| Maximum DC Reverse Current (Note 1) $T_a=25^\circ\text{C}$ at Rated DC Blocking Voltage $T_a=100^\circ\text{C}$ | I_R | 0.5 | | | | mA |
| | | 10 | | 10 | | |
| Typical Thermal Resistance (Note 2) | $R\theta_{JA}$ | 75 | | | | / W |
| | $R\theta_{JL}$ | 17 | | | | |
| Operating Temperature Range | T_J | -50 ~ +125 | | | | |
| Storage Temperature Range | T_{STG} | -65 ~ +150 | | | | |

NOTES:

1. Pulse test width PW=300 usec, 1% duty cycle.
2. Mounted on P.C. board with 0.2 x 0.2" (5.0 x 5.0mm) copper pad areas.

FIG.1 - FORWARD CURRENT DERATING CURVE

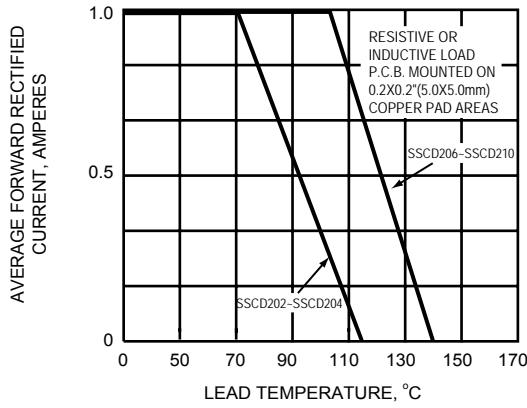


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

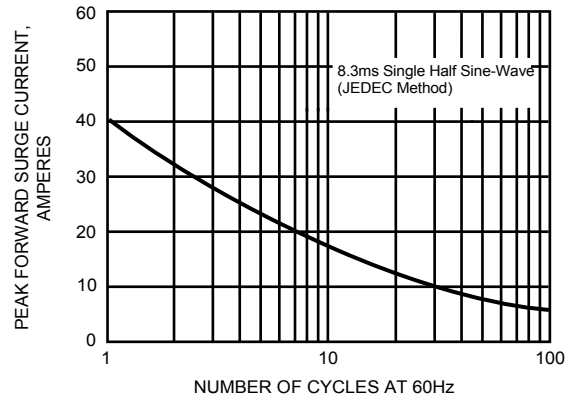


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

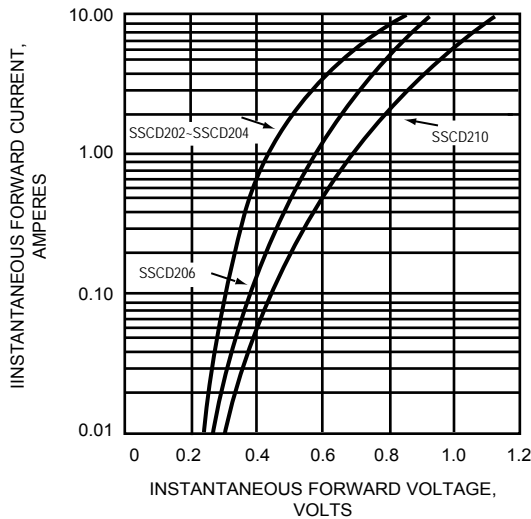


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

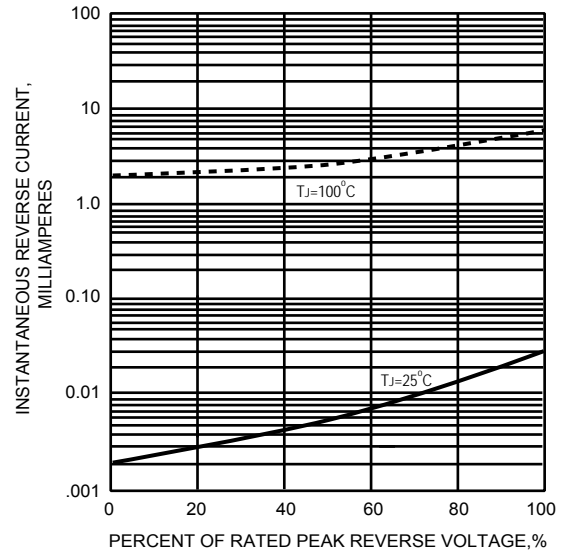


FIG.5 - TYPICAL JUNCTION CAPACITANCE

