

RoHS Compliant Product

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

SMA

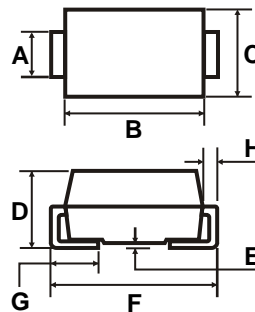
FEATURES

- * Ideal for surface mount applications
- * Easy pick and place
- * Built-in strain relief
- * Super low forward voltage drop & Low I_r



MECHANICAL DATA

- * Case: Molded plastic
- * Epoxy: UL 94V-0 rate flame retardant
- * Metallurgically bonded construction
- * Polarity: Color band denotes cathode end
- * Mounting position: Any
- * Weight: 0.063 grams



| | Dimensions in Millimeters | | Dimensions in Inches | |
|----------|---------------------------|-------|----------------------|-------|
| | | | | |
| A | 1.25 | 1.65 | 0.049 | 0.065 |
| B | 3.99 | 4.60 | 0.157 | 0.181 |
| C | 2.50 | 2.90 | 0.098 | 0.114 |
| D | 1.98 | 2.44 | 0.078 | 0.096 |
| E | 0.051 | 0.203 | 0.002 | 0.008 |
| F | 4.78 | 5.28 | 0.188 | 0.208 |
| G | 0.76 | 1.52 | 0.030 | 0.060 |
| H | 0.152 | 0.305 | 0.006 | 0.012 |

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 | SK12AL | SK14AL | UNITS |
|--|------------|--------|---------------------------|
| Maximum Recurrent Peak Reverse Voltage | 20 | 40 | V |
| Maximum RMS Voltage | 20 | 40 | V |
| Maximum DC Blocking Voltage | 20 | 40 | V |
| Maximum Average Forward Rectified Current | 1 | | A |
| Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method) | 80 | | A |
| Maximum Instantaneous Forward Voltage at 1.0A | 0.39 | 0.41 | V |
| Maximum DC Reverse Current $T_a=25^\circ\text{C}$ | 0.1 | | mA |
| at Rated DC Blocking Voltage $T_a=80^\circ\text{C}$ | 5 | | mA |
| Thermal Resistance, Junction to Ambient * $R_{\theta JA}$ | 88 | | $^\circ\text{C}/\text{W}$ |
| Operating Temperature Range T_J | -25 ~ +125 | | $^\circ\text{C}$ |
| Storage Temperature Range T_{STG} | -50 ~ +150 | | $^\circ\text{C}$ |

*Device mounted on FR-4PCB0.013mm

RATING AND CHARACTERISTIC CURVES (SK12AL THRU SK14AL)

FIG.1 TYPICAL FORWARD CURRENT DERATING CURVE

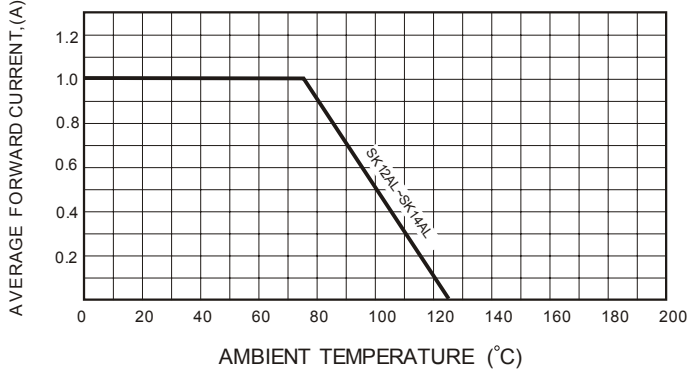


FIG.2 TYPICAL FORWARD CHARACTERISTICS

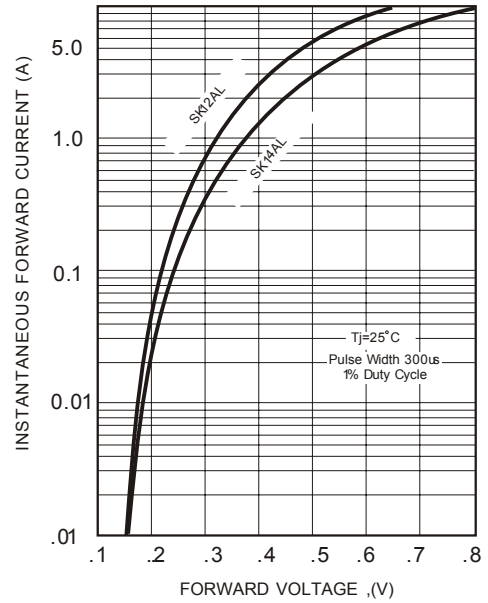


FIG.3-TYPICAL JUNCTION CAPACITANCE

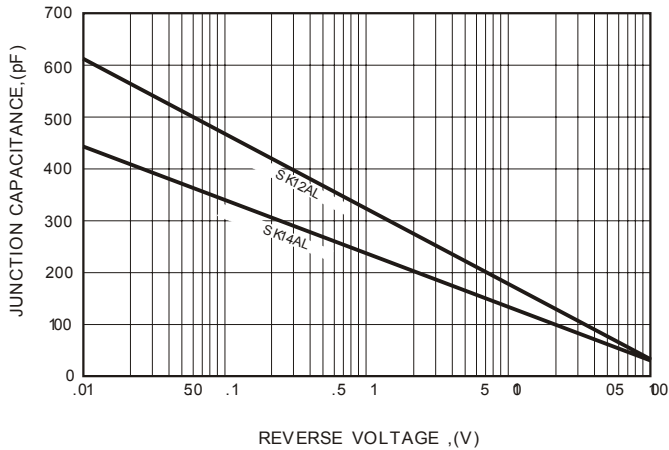


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

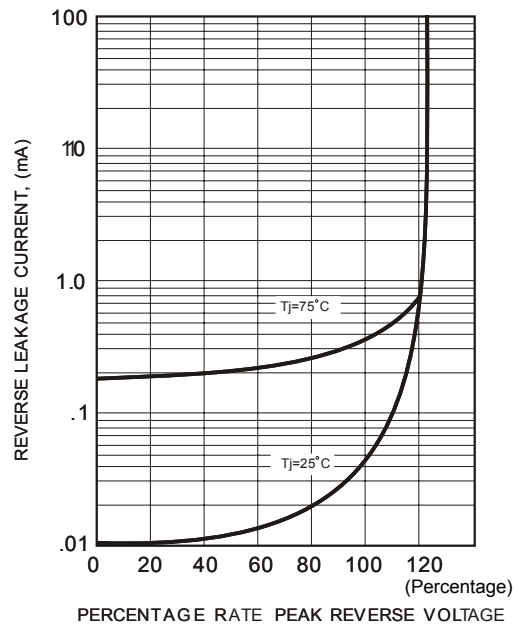


FIG.5 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

