

RoHS Compliant Product

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

**SMA**

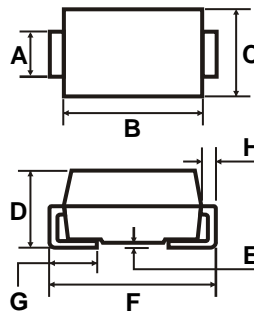
## FEATURES

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



## 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 |       |
|----------|---------------------------|-------|----------------------|-------|
|          |                           |       |                      |       |
| <b>A</b> | 1.25                      | 1.65  | 0.049                | 0.065 |
| <b>B</b> | 3.99                      | 4.60  | 0.157                | 0.181 |
| <b>C</b> | 2.50                      | 2.90  | 0.098                | 0.114 |
| <b>D</b> | 1.98                      | 2.44  | 0.078                | 0.096 |
| <b>E</b> | 0.051                     | 0.203 | 0.002                | 0.008 |
| <b>F</b> | 4.78                      | 5.28  | 0.188                | 0.208 |
| <b>G</b> | 0.76                      | 1.52  | 0.030                | 0.060 |
| <b>H</b> | 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  | SK12L      | SK12LL | SK12SL | SK14L | SK14LL | SK14SL | UNITS |
|--|------------|--------|--------|-------|--------|--------|-------|
| Maximum Recurrent Peak Reverse Voltage   | 20         | 20     | 20     | 40    | 40     | 40     | V     |
| Maximum RMS Voltage  | 14         | 14     | 14     | 28    | 28     | 28     | V     |
| Maximum DC Blocking Voltage  | 20         | 20     | 20     | 40    | 40     | 40     | V     |
| Maximum Average Forward Rectified Current  | 1.0        |        |        |       |        |        | A     |
| Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method) | 35         | 45     | 70     | 45    | 70     | 90     | A     |
| Maximum Instantaneous Forward Voltage at 1.0A  | 0.36       | 0.32   | 0.29   | 0.38  | 0.34   | 0.31   | V     |
| Maximum DC Reverse Current $T_a=25^\circ\text{C}$  | 1.0        |        |        |       |        |        | mA    |
| at Rated DC Blocking Voltage $T_a=80^\circ\text{C}$  | 40         |        |        |       |        |        | mA    |
| Operating Temperature Range $T_J$  | -25 ~ +80  |        |        |       |        |        | °C    |
| Storage Temperature Range $T_{STG}$  | -50 ~ +125 |        |        |       |        |        | °C    |

RATING AND CHARACTERISTIC CURVES (SK12L THRU SK14SL)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

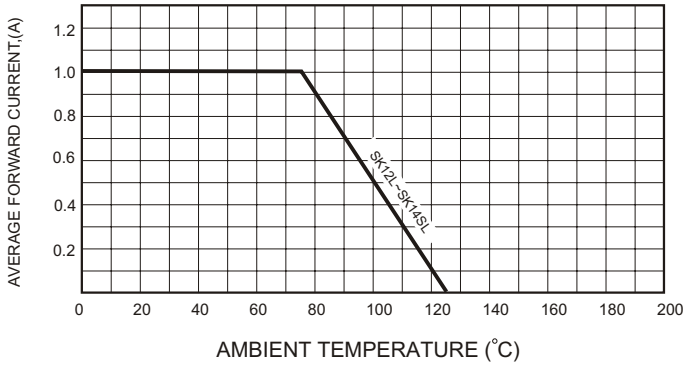


FIG.2-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

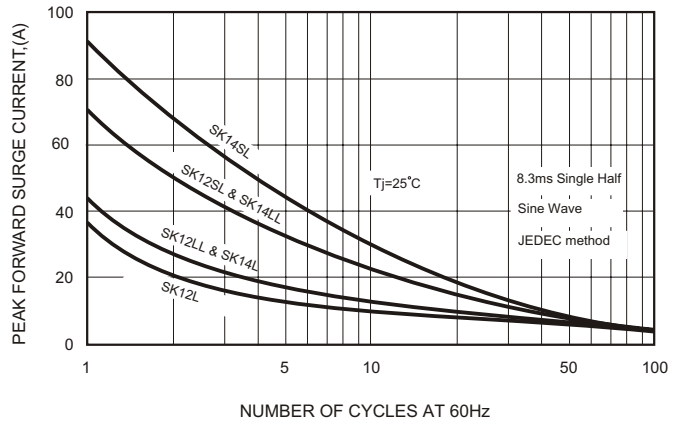


FIG.3-TYPICAL JUNCTION CAPACITANCE

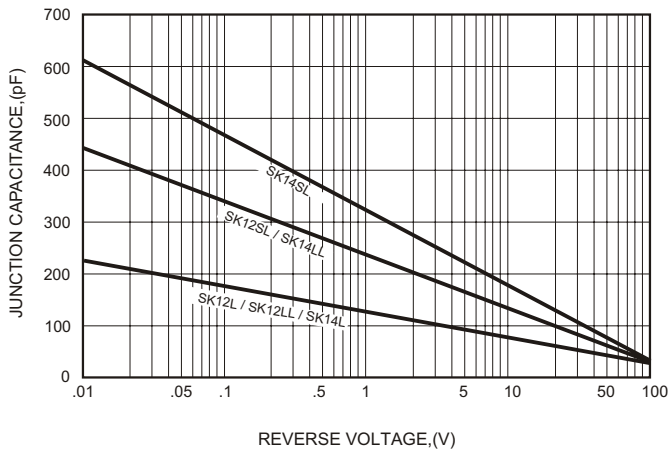


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

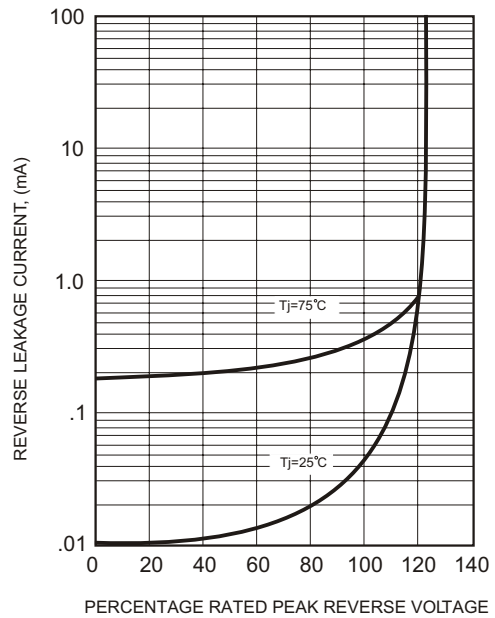


FIG. 5 (For SK12L)

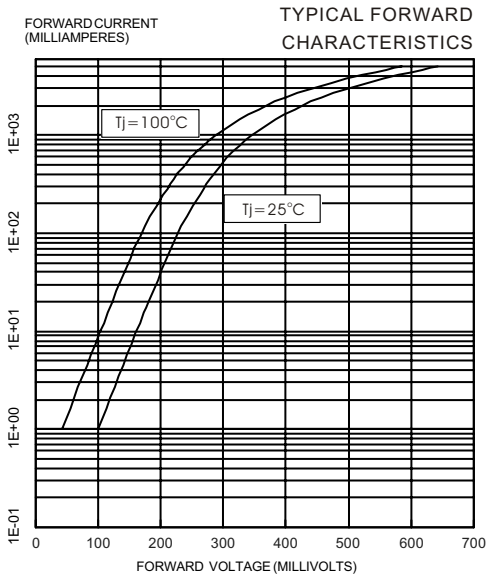


FIG. 6 (For SK12LL)

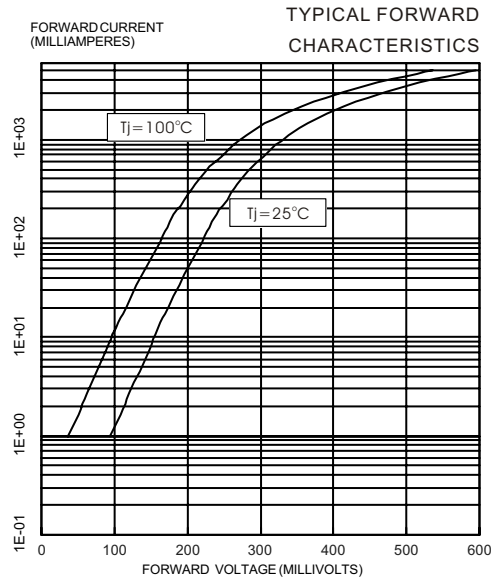


FIG. 7 (For SK12SL)

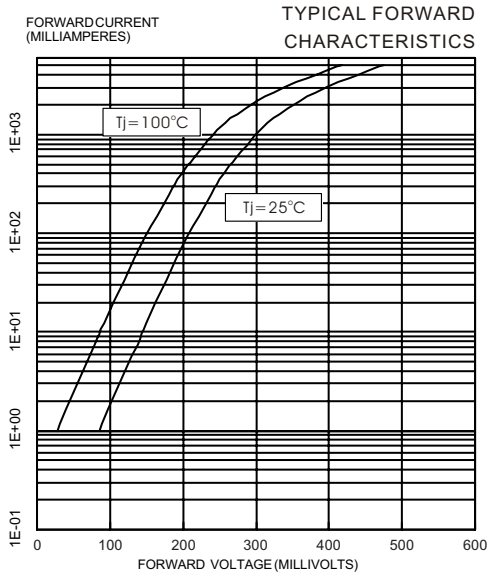


FIG. 8 (For SK14L)

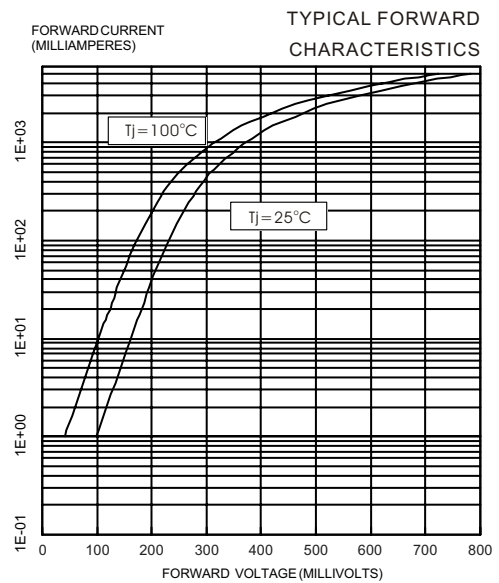


FIG. 9 (For SK14LL)

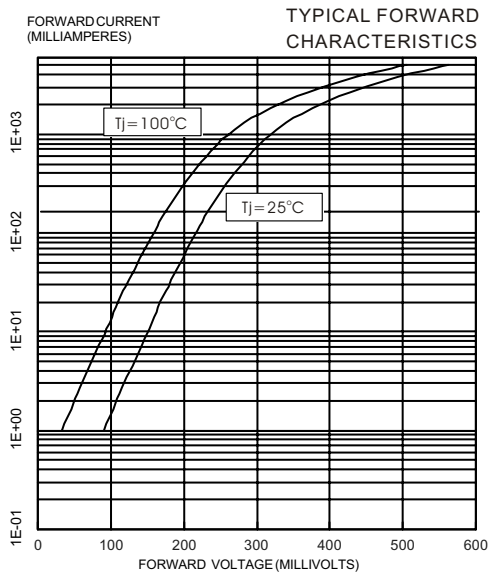


FIG. 10 (For SK14SL)

