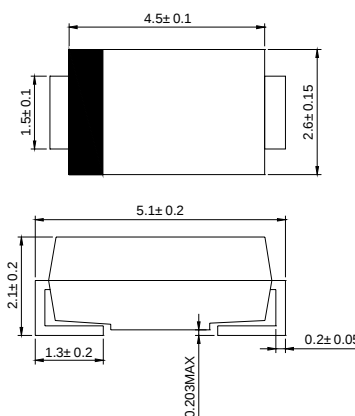


**SURFACE MOUNT SCHOTTKY  
BARRIER RECTIFIERS****REVERSE VOLTAGE: 20 - 100 V**  
**FORWARD CURRENT: 1.0 A****FEATURES**

- ◇ Schottky barrier rectifier
- ◇ Guardring protection
- ◇ Low forward voltage
- ◇ Reverse energy tested
- ◇ High current capability
- ◇ Extremely low thermal resistance

**MECHANICAL DATA**

- ◇ Case: SMA molded plastic body
- ◇ Polarity: Color band denotes cathode end
- ◇ Mounting position: ANY
- ◇ Weight: 0.002 ounces, 0.064 gram

**(DO-214AC)SMA**

Dimensions in millimeters

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Ratings at 25°C ambient temperature unless otherwise specified

|                                                                                                       |                    | SK12          | SK13 | SK14 | SK15 | SK16 | SK18 | SK19 | SK110 | UNITS |
|-------------------------------------------------------------------------------------------------------|--------------------|---------------|------|------|------|------|------|------|-------|-------|
| Device marking code                                                                                   |                    | SK12          | SK13 | SK14 | SK15 | SK16 | SK18 | SK19 | SK110 |       |
| Maximum repetitive peak reverse voltage                                                               | V <sub>RRM</sub>   | 20            | 30   | 40   | 50   | 60   | 80   | 90   | 100   | V     |
| Maximum RMS voltage                                                                                   | V <sub>RWS</sub>   | 14            | 21   | 28   | 35   | 42   | 56   | 63   | 70    | V     |
| Maximum DC blocking voltage                                                                           | V <sub>DC</sub>    | 20            | 30   | 40   | 50   | 60   | 80   | 90   | 100   | V     |
| Maximum average forward rectified current at T <sub>L</sub> =90°C                                     | I <sub>F(AV)</sub> | 1.0           |      |      |      |      |      |      |       | A     |
| Peak forward surge current 8.3ms single half-sine-wave                                                | I <sub>FSM</sub>   | 30.0          |      |      |      |      |      |      |       | A     |
| Maximum instantaneous forward voltage at I <sub>FM</sub> =1.0A (NOTE1)                                | V <sub>F</sub>     | 0.50          |      |      | 0.70 |      | 0.85 |      |       | V     |
| Maximum DC reverse current T <sub>J</sub> =25°C<br>at rated DC blocking voltage T <sub>J</sub> =100°C | I <sub>R</sub>     | 0.5<br>20     |      |      |      |      |      |      |       | m A   |
| Maximum thermal resistance                                                                            | R <sub>θ JL</sub>  | 35.0          |      |      |      |      |      |      |       | °C/W  |
| Operating temperature range                                                                           | T <sub>J</sub>     | -55 ---- +125 |      |      |      |      |      |      |       | °C    |
| Storage temperature range                                                                             | T <sub>STG</sub>   | -55 ---- +150 |      |      |      |      |      |      |       | °C    |

NOTE: 1.Pulse test: Pulse width 300us,duty cycle 1 %

FIG.1 -- FORWARD DERATING CURVE

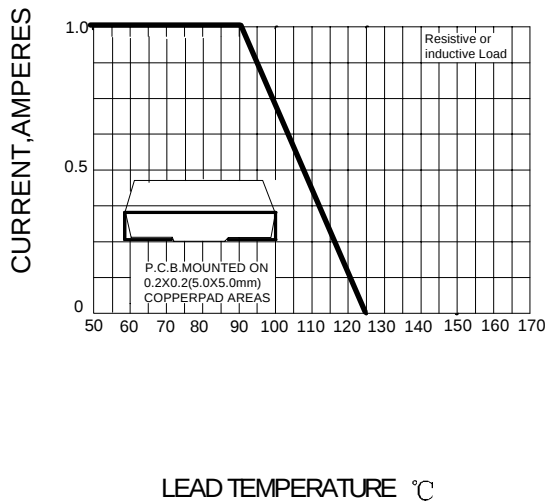


FIG.2- PEAK FORWARD SURGE CURRENT

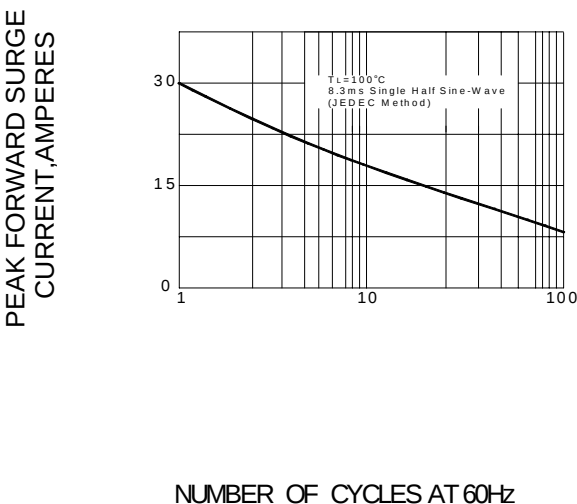


FIG.3 -- TYPICAL FORWARD CHARACTERISTICS

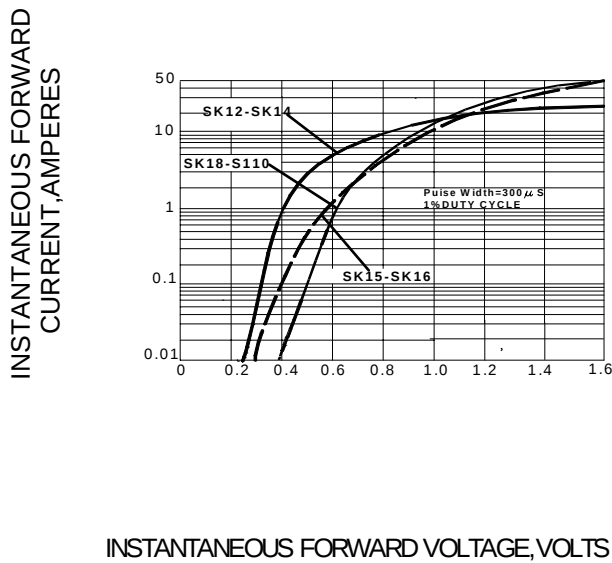


FIG.4 -- TYPICAL REVERSE CHARACTERISTICS

