SIRECT
ELECTRONIC

# SCR104 ~ SCR1020

## Power Schottky Rectifier - 10Amp 40~200Volt

### ☐ Features

-For surface mounted applications
-Low profile package
-Built-in strain relief
-Metal silicon junction, majority carrier conduction
-Low power loss, high efficiency
-High current capability, low forward voltage drop
-High temperature soldering guaranteed
-High reliability
-High surge current capability
-Epitaxial construction
-Lead free device
-Halogen-Free

### ☐ Mechanical data

-Case：Molded plastic
-Epoxy：UL 94V-0 rate flame retardant
-Terminals：Solder plated, solderable per MIL-STD-750,method 2026
-Polarity：Color band denotes cathode end
-Weight：0.007 ounce 0.21 grams

### ☐ Maximum ratings and Electrical characteristics

| Parameters | | SCR104 | SCR106 | SCR1010 | SCR1015 | SCR1020 | UNIT |
|---|---|---|---|---|---|---|---|
| Marking Code | | SS104 | SS106 | SS110 | S1015 | S1020 | |
| Maximum Recurrent Peak Reverse Voltage | | 40 | 60 | 100 | 150 | 200 | V |
| Maximum RMS Voltage | | 28 | 42 | 70 | 105 | 140 | V |
| Maximum DC Blocking Voltage | | 40 | 60 | 100 | 150 | 200 | V |
| Maximum Average Forward Rectified Current | | 10 | | | | | A |
| Peak Forward Surge Current | | 120 | | | | | A |
| Maximum Instantaneous Forward Voltage at 10A | Tc = 25°C | 0.55 | 0.70 | 0.85 | 0.88 | 0.90 | V |
| | Tc = 125°C | 0.50 | 0.60 | 0.66 | 0.69 | 0.72 | |
| Maximum Average Reverse Current at Rated DC Blocking Voltage | Tc = 25°C | 0.5 | | 0.05 | | | mA |
| | Tc = 100°C | 20 | | 10 | | | |
| Typical Junction Capacitance | | 350 | | | | | pF |
| Typical Thermal Resistance $R_{\theta JL}$ (Note 1) | | 17 | | | | | °C/W |
| Operating and Storage Temperature Range | | -50 to +125 | | -50 to +150 | | | °C |

Note : 1. Mounted on P.C.B with copper pad size 16mm x 16mm

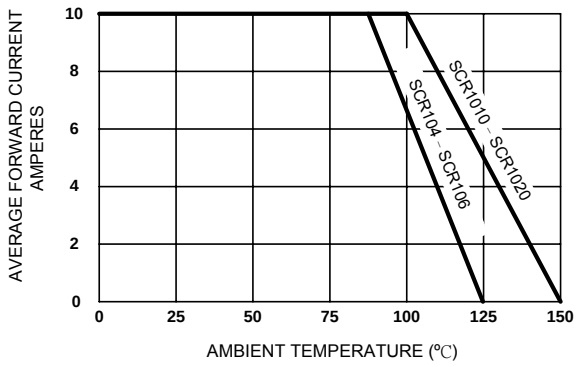


**Figure 1. Forward Current Derating Curve**

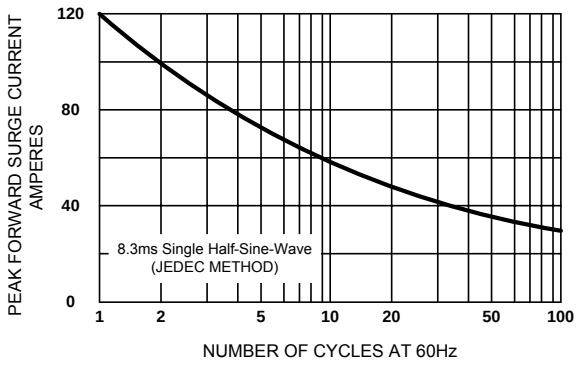


**Figure 2. Maximum Non-repetitive Surge Current**

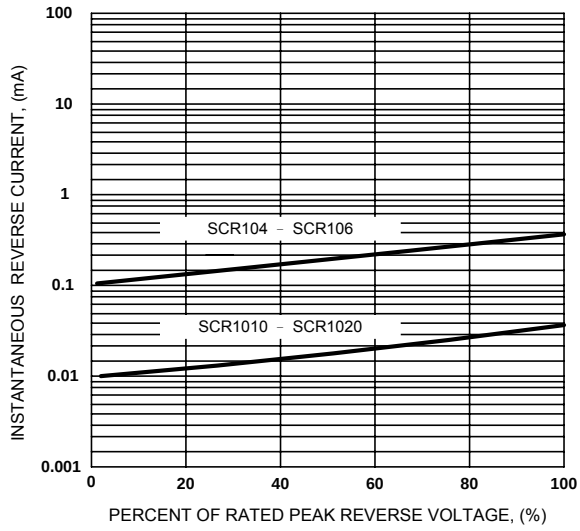


**Figure 3. Typical Reverse Characteristics**

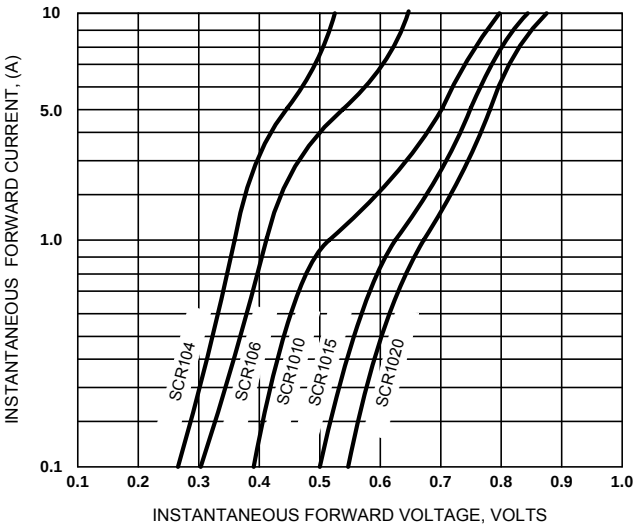


**Figure 4. Typical Forward Characteristics**

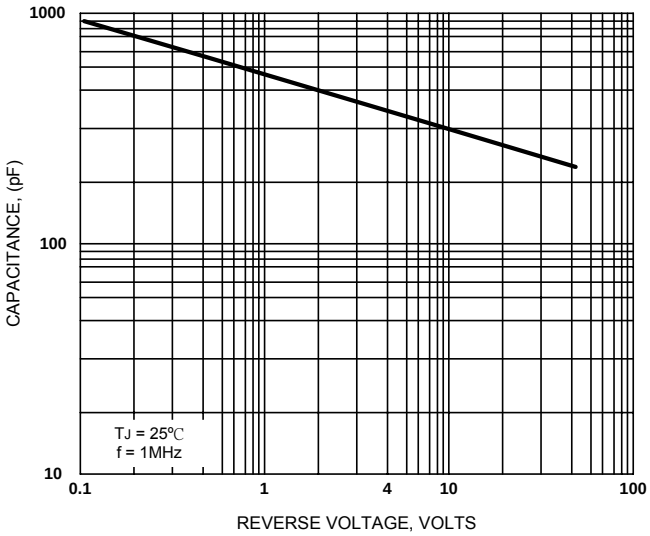


**Figure 5. Typical Junction Capacitance**

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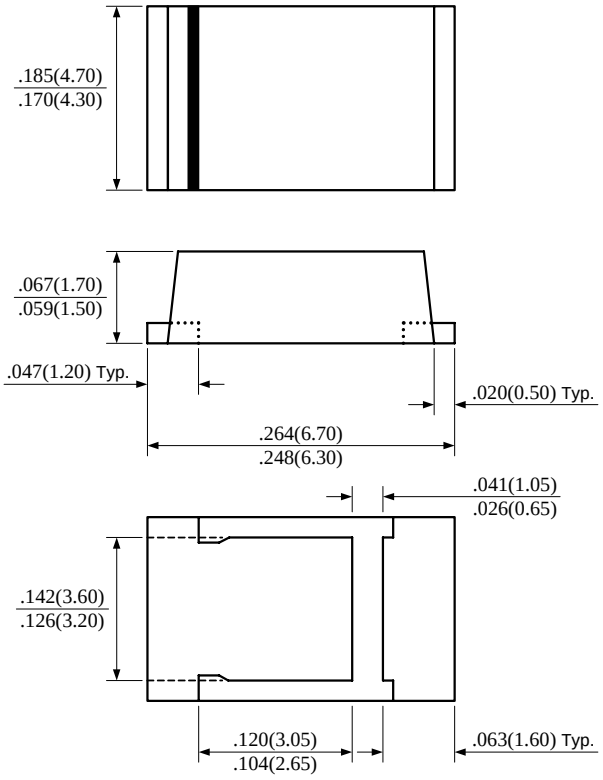
## SMC – T3




UNIT : inch(mm)

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