



Elektronische Bauelemente

SM320C THRU SM3100C

VOLTAGE 20V ~ 100V

3.0 AMP Surface Mount Schottky Barrier Rectifiers

RoHS Compliant Product

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

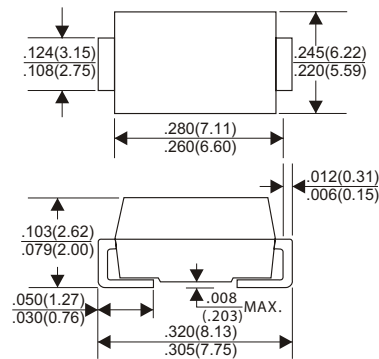
FEATURES

- RoHS Compliant Product
- Ideal for surface mount applications
- Easy pick and place
- Built-in strain relief
- 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: 0.25 grams

DO-214AB (SMC)



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%.

| | SM320C | SM340C | SM360C | SM3100C | |
|--|--------------|--------|--------|---------|------|
| Maximum Recurrent Peak Reverse Voltage | 20 | 40 | 60 | 100 | V |
| Working Peak Reverse Voltage | 20 | 40 | 60 | 100 | V |
| Maximum DC Blocking Voltage | 20 | 40 | 60 | 100 | V |
| Maximum Average Forward Rectified Current, See Fig. 1 | 3.0 | | 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 3.0A | 0.50 | | 0.65 | 0.80 | V |
| Maximum DC Reverse Current Ta=25 °C | 0.2 | | | | mA |
| At Rated DC Blocking Voltage Ta=100 °C | 20 | | | | |
| Typical Junction Capacitance (Note 1) | 300 | | | | pF |
| Typical Thermal Resistance RθJL (Note 2) | 18 | | | | °C/W |
| Operating Temperature Range T _J | - 50 ~ + 150 | | | | °C |
| Storage Temperature Range T _{STG} | - 65 ~ + 175 | | | | °C |

NOTES:

1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
2. Thermal Resistance Junction to Lead.

● RATING AND CHARACTERISTIC CURVES (SM320C THRU SM3100C)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

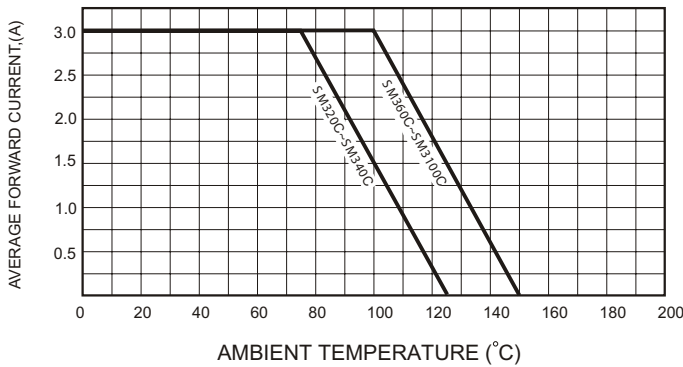


FIG.2-TYPICAL FORWARD CHARACTERISTICS

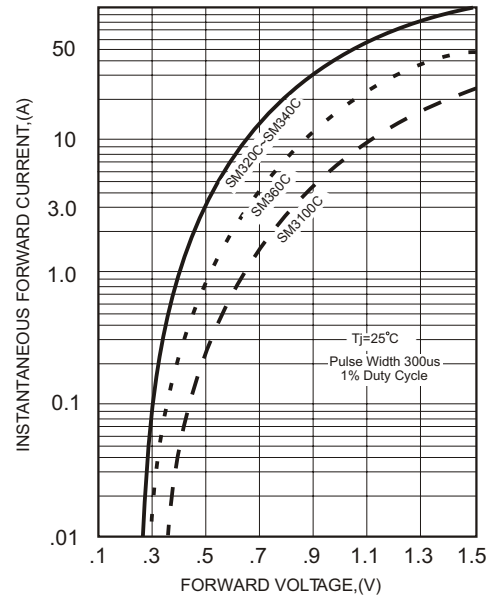


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

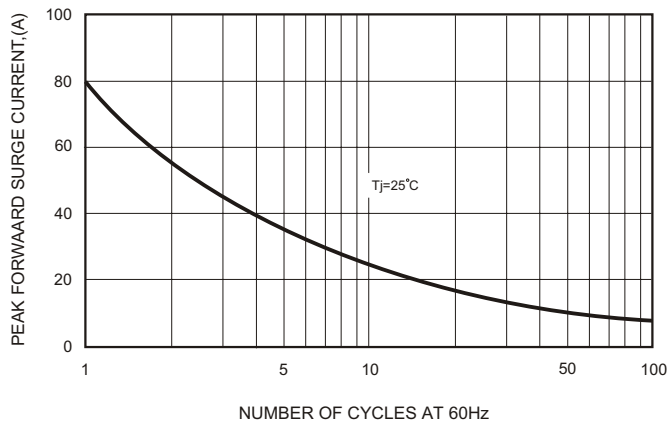


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

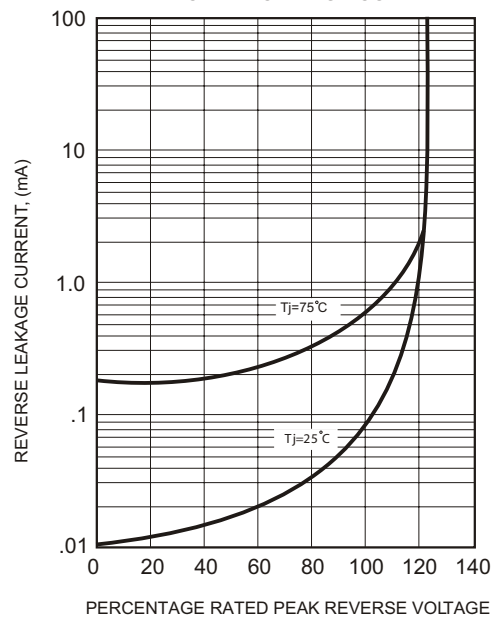


FIG.4-TYPICAL JUNCTION CAPACITANCE

