



Elektronische Bauelemente

# SM320B THRU SM3100B

VOLTAGE 20V ~ 100V

3.0 AMP Surface Mount Schottky Barrier Rectifiers

RoHS Compliant Product

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

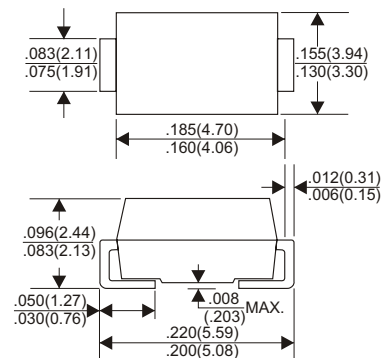
## FEATURES

- 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: 0.102 grams

DO-214AA (SMB)



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%.

TYPE NUMBER	SM320B	SM330B	SM340B	SM350B	SM360B	SM380B	SM390B	SM3100B	UNITS
Maximum Recurrent Peak Reverse Voltage	20	30	40	50	60	80	90	100	V
Working Peak Reverse Voltage	20	30	40	50	60	80	90	100	V
Maximum DC Blocking Voltage	20	30	40	50	60	80	90	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	0.45	0.52		0.65		0.83			V
Maximum DC Reverse Current Ta=25 °C	0.2								mA
At Rated DC Blocking Voltage Ta=100 °C	10								
Typical Junction Capacitance (Note 1)	300								pF
Typical Thermal Resistance RθJL (Note 2)	22								°C / W
Operating Temperature Range T <sub>J</sub>	- 50 ~ + 150								°C
Storage Temperature Range T <sub>STG</sub>	- 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 (SM320B THRU SM3100B)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

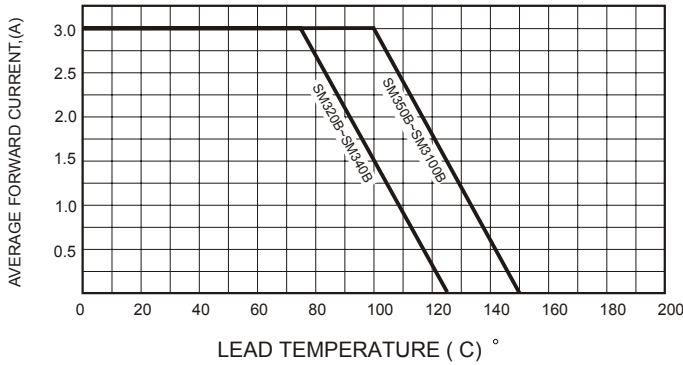


FIG.2-TYPICAL FORWARD CHARACTERISTICS

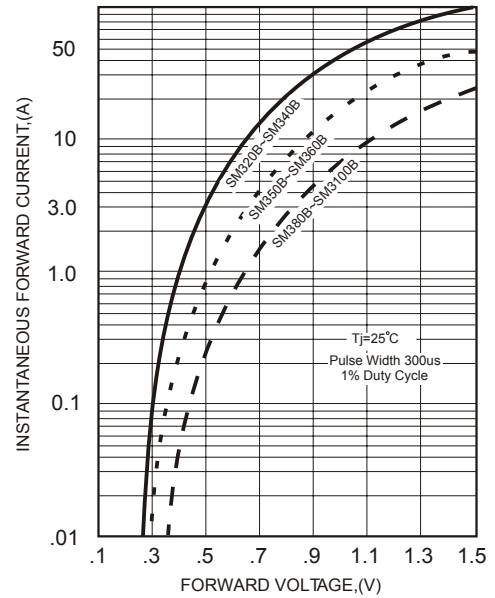


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

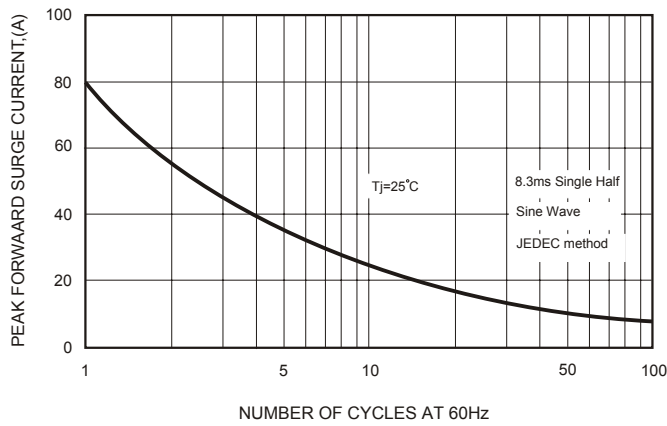


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

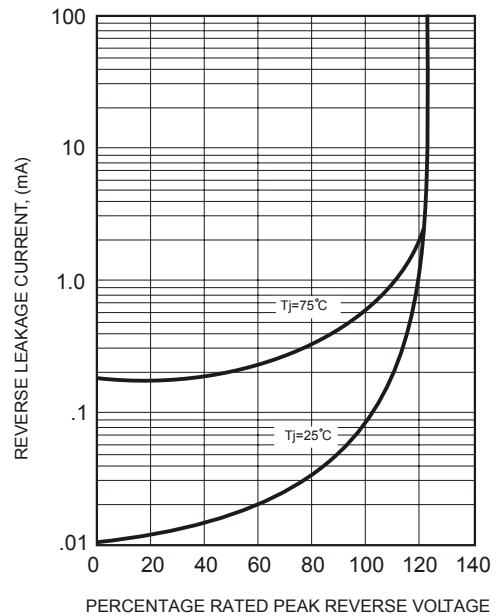


FIG.4-TYPICAL JUNCTION CAPACITANCE

