



Elektronische Bauelemente

SM220B THRU SM2100B

VOLTAGE 20V ~ 100V

2.0 AMP Surface Mount Schottky Barrier Rectifiers

RoHS Compliant Product

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

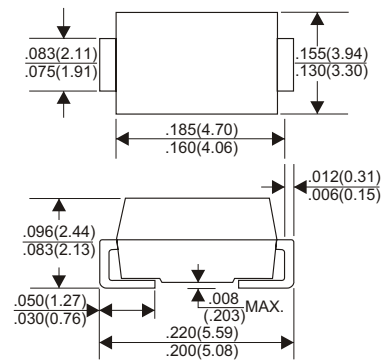
FEATURES

- 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	SM220B	SM230B	SM240B	SM260B	SM2100B	UNITS
Maximum Recurrent Peak Reverse Voltage	20	30	40	60	100	V
Working Peak Reverse Voltage	20	30	40	60	100	V
Maximum DC Blocking Voltage	20	30	40	60	100	V
Maximum Average Forward Rectified Current, See Fig. 1	2.0					A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	60					A
Maximum Instantaneous Forward Voltage at 2.0A	0.52			0.65	0.83	V
Maximum DC Reverse Current Ta=25 °C	0.2			0.1	0.1	mA
At Rated DC Blocking Voltage Ta=100 °C	15			10	4	
Typical Junction Capacitance (Note 1)	170					pF
Typical Thermal Resistance RθJA (Note 2)	24					°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. Valid provided that terminals are kept at ambient temperature.

● RATING AND CHARACTERISTIC CURVES (SM220B THRU SM2100B)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

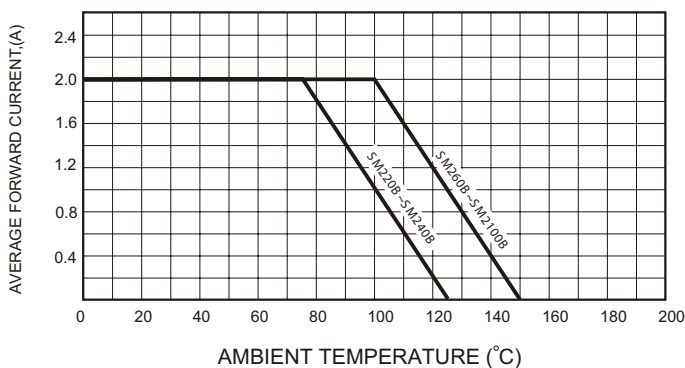


FIG.2-TYPICAL FORWARD CHARACTERISTICS

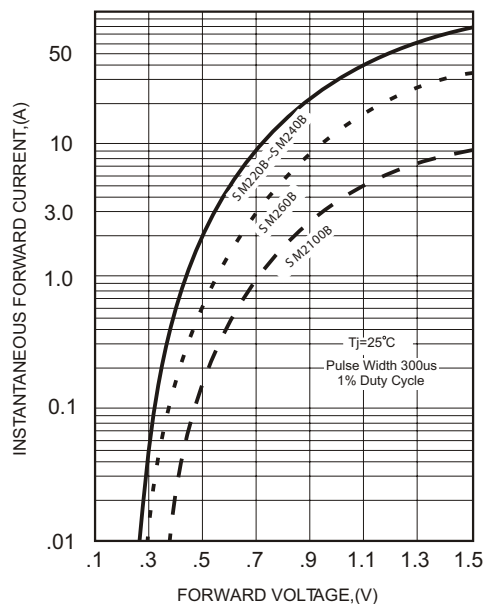


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

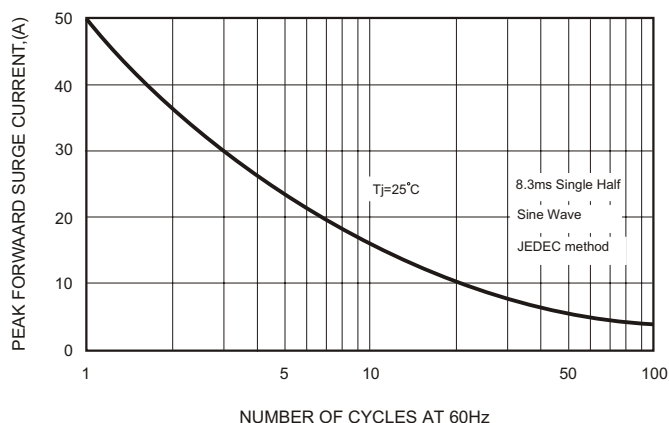


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

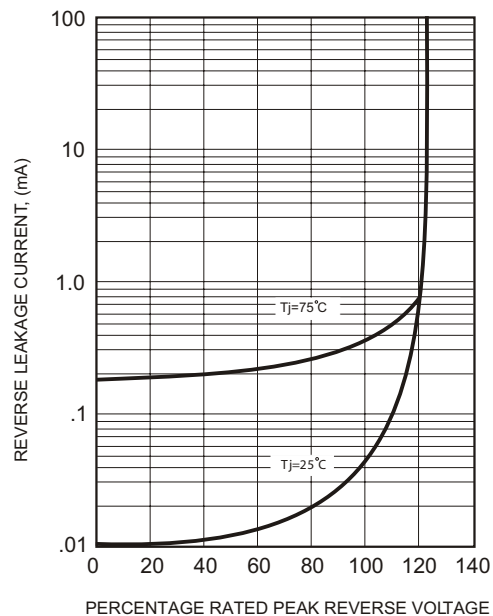


FIG.4-TYPICAL JUNCTION CAPACITANCE

