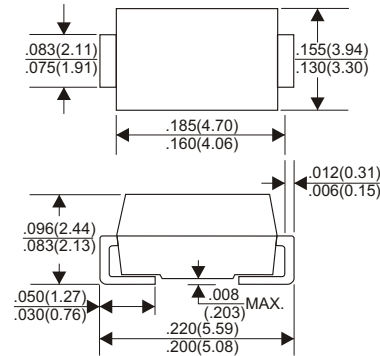


RoHS Compliant Product

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



DO-214AA(SMB)



Dimensions in inches and (millimeters)

## FEATURES

- \* 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

## 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	SM120B	SM140B	SM160B	SM1100B	UNITS
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	1.0				A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	35				A
Maximum Instantaneous Forward Voltage at 1.0A	0.45	0.52	0.65	0.83	V
Maximum DC Reverse Current at Rated DC Blocking Voltage	0.1				mA
	6				mA
Typical Junction Capacitance (Note1)	110				pF
Typical Thermal Resistance R <sub>θJA</sub> (Note 2)	50				°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 Ambient.

RATING AND CHARACTERISTIC CURVES (SM120B THRU SM1100B)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

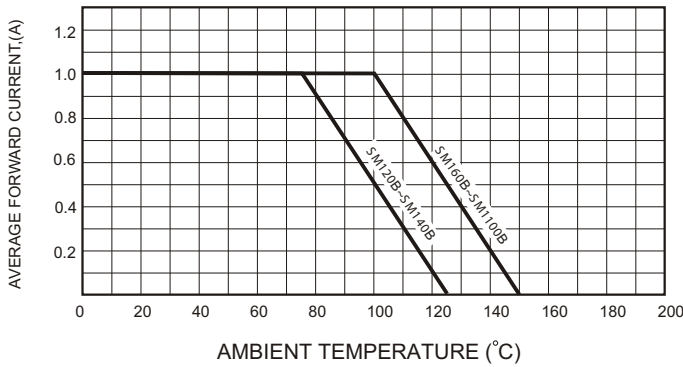


FIG.2-TYPICAL FORWARD CHARACTERISTICS

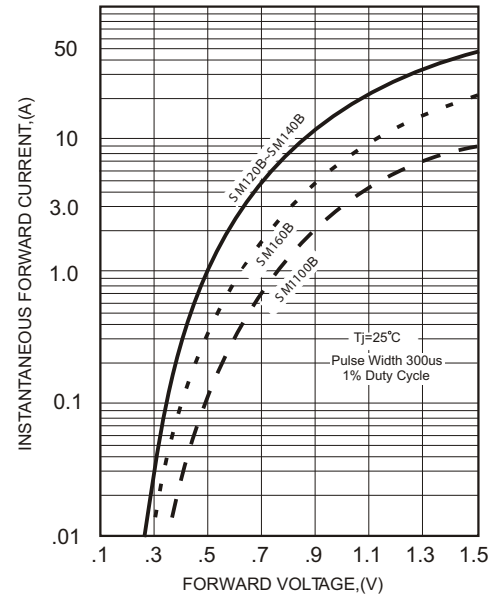


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

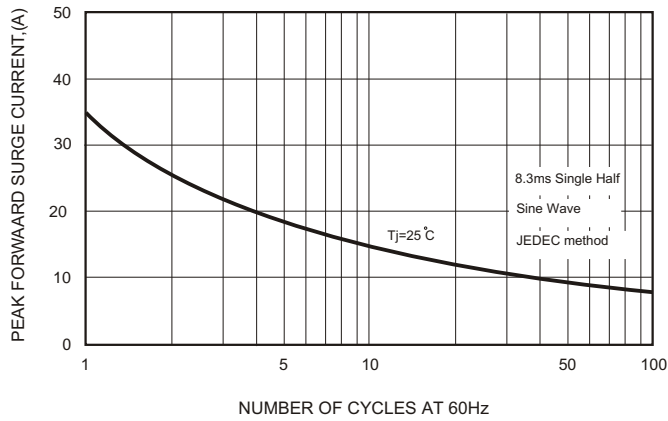


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

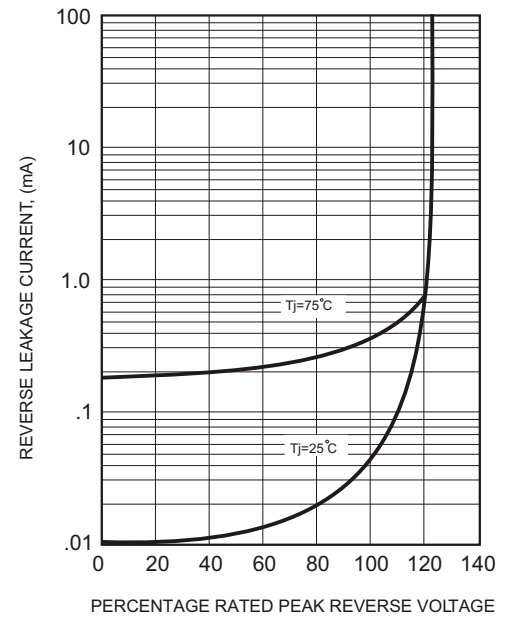


FIG.4-TYPICAL JUNCTION CAPACITANCE

