

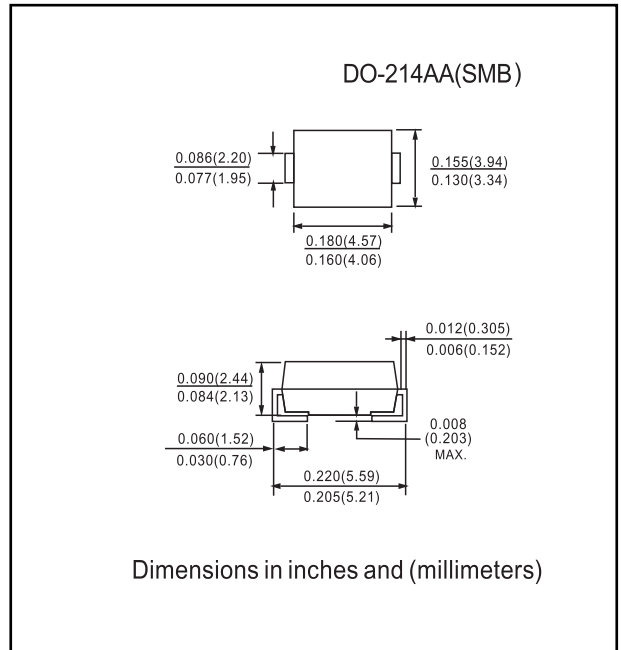


**FEATURES**

- \* 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	SM220B	SM230B	SM240B	SM250B	SM260B	SM280B	SM290B	SM2100B	UNITS	
Maximum Recurrent Peak Reverse Voltage	20	30	40	50	60	80	90	100	V	
Maximum RMS Voltage	14	21	28	35	42	56	63	70	V	
Maximum DC Blocking Voltage	20	30	40	50	60	80	90	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)	50								A	
Maximum Instantaneous Forward Voltage at 2.0A	0.55		0.70		0.85				V	
Maximum DC Reverse Current Ta=25°C	1.0								mA	
at Rated DC Blocking Voltage Ta=100°C	20								mA	
Typical Junction Capacitance (Note1)	170								pF	
Typical Thermal Resistance R JA (Note 2)	75								°C/W	
Operating Temperature Range Tj	-65 — +125			-65 — +150						°C
Storage Temperature Range Tstg	-65 — +150								°C	

NOTES:

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

**RATINGS AND CHARACTERISTIC CURVES SM220B THRU SM2100B**

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

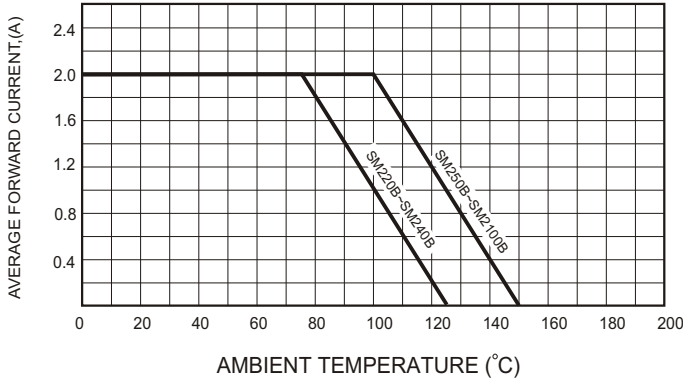


FIG.2-TYPICAL FORWARD

CHARACTERISTICS

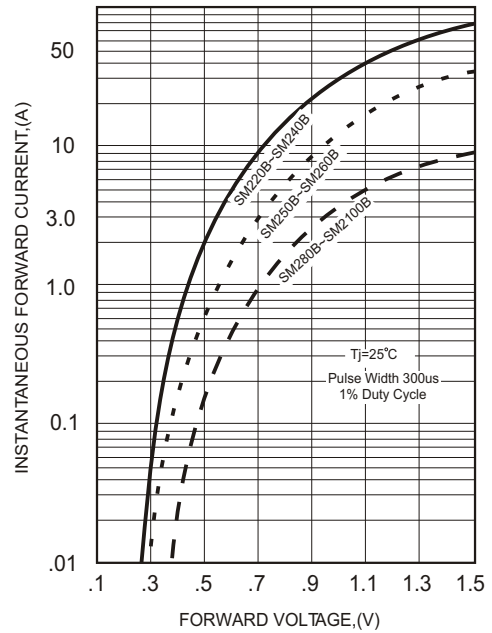


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

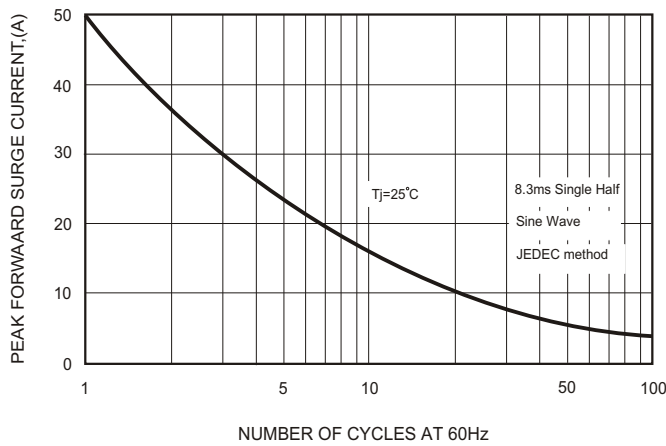


FIG.5 - TYPICAL REVERSE

CHARACTERISTICS

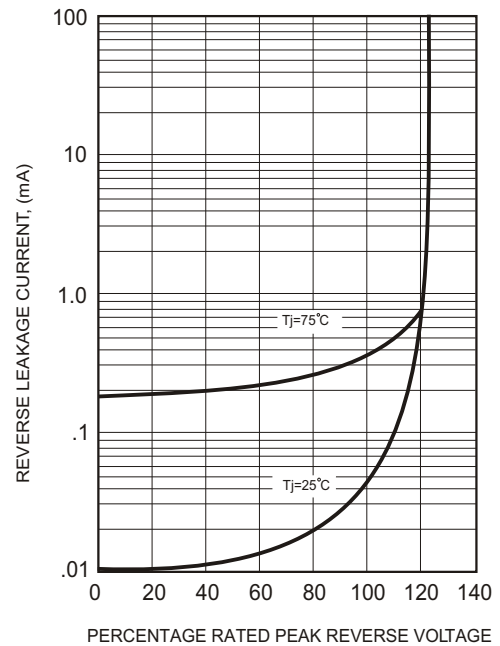


FIG.4-TYPICAL JUNCTION CAPACITANCE

