

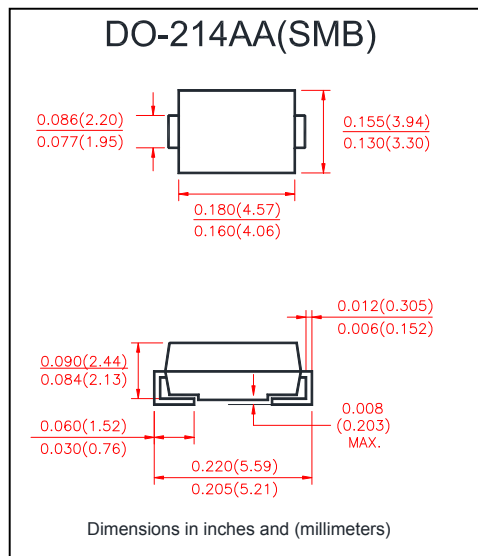


## FEATURES

- Low profile surface mount package
- Built-in strain relief
- High switching speed
- Low voltage drop, high efficiency
- For use in low voltage high frequency inverters, Free willing, and polarity protection applications
- Guarding for over voltage protection

## MECHANICAL DATA

- Case: Transfer molded plastic
- Epoxy: UL 94V-0 rate flame retardant
- Lead: Solder plated, solderable per MIL-STD-750 method 2026
- Polarity: Color band denotes cathode end



## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

- Ratings at 25°C ambient temperature unless otherwise specified.
- Single phase, half wave, 60Hz, resistive or inductive load.
- For capacitive load derate current by 20%.

		SYMBOLS	SS 32B	SS 33B	SS 34B	SS 35B	SS 36B	SS 38B	SS 39B	SS 310B	UNIT
Maximum Repetitive Peak Reverse Voltage		V <sub>RRM</sub>	20	30	40	50	60	80	90	100	Volts
Maximum RMS Voltage		V <sub>RMS</sub>	14	21	28	35	42	56	63	70	Volts
Maximum DC Blocking Voltage		V <sub>DC</sub>	20	30	40	50	60	80	90	100	Volts
Maximum Average Forward Rectified Current at T <sub>I</sub> see figure 1 T <sub>L</sub> =105℃		I <sub>(AV)</sub>	3.0								Amps
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)		I <sub>FSM</sub>	80								Amps
Maximum Instantaneous Forward Voltage @ 3.0A(Note1)		V <sub>F</sub>	0.50	0.55		0.70		0.85			Volts
Maximum DC Reverse Current at rated DC Blocking Voltage per element	T <sub>A</sub> = 25℃	I <sub>R</sub>	0.5								mA
	T <sub>A</sub> = 100℃		20		10						
Typical Thermal Resistance (Note 2)		R <sub>θJA</sub>	55								℃/W
		R <sub>θJL</sub>	12								
Operating Junction Temperature		T <sub>J</sub>	-55 to +125								℃
Storage Temperature Range		T <sub>STG</sub>	-55 to +150								℃

### Notes:

1. Pulse test: 300  $\mu\text{s}$  pulse width, 1% duty cycle
2. PCB mounted with 0.55"  $\times$  0.55" (14mm  $\times$  14mm) copper pads



FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

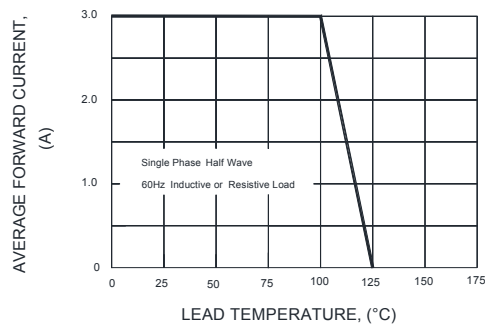


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

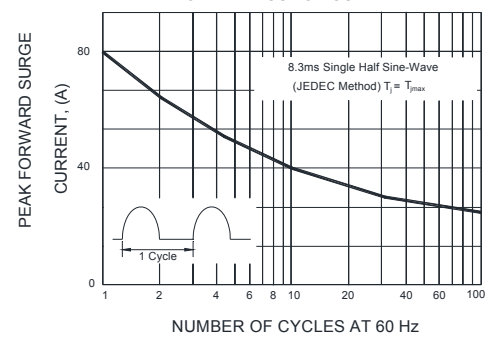


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

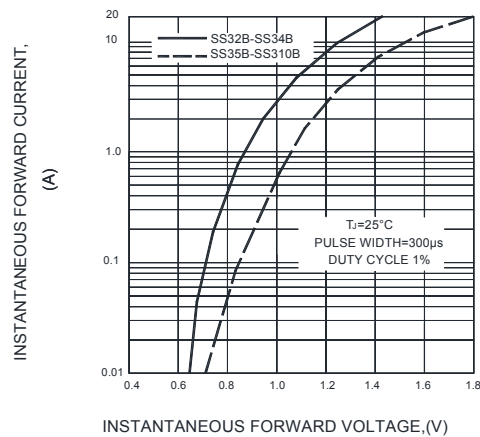


FIG.4-TYPICAL REVERSE CHARACTERISTICS

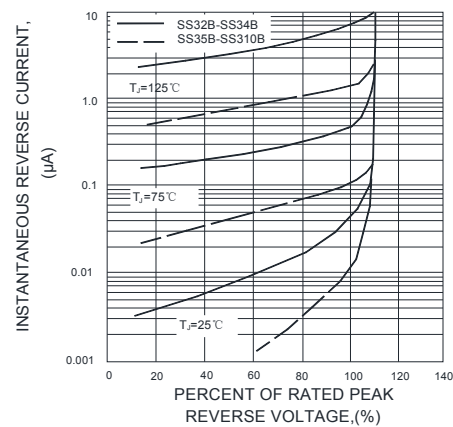


FIG.5-TYPICAL JUNCTION CAPACITANCE

