

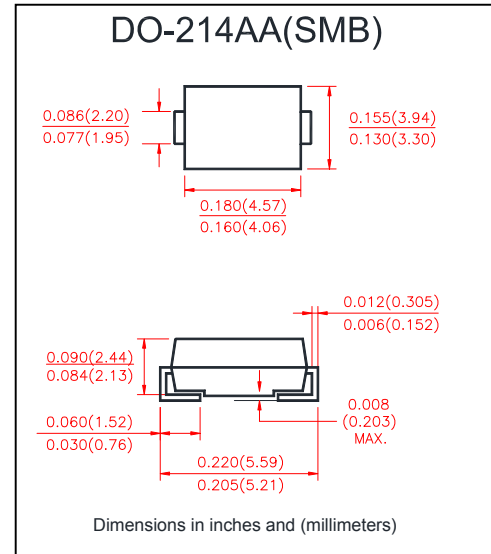


FEATURES

- 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	SS52B SK52B	SS53B SK53B	SS54B SK54B	SS55B SK55B	SS56B SK56B	SS58B SK58B	SS59B SK59B	SS510B SK510B	UNIT
Maximum Repetitive Peak Reverse Voltage		V _{RRM}	20	30	40	50	60	80	90	100	Volts
Maximum RMS Voltage		V _{RMS}	14	21	28	35	42	56	63	70	Volts
Maximum DC Blocking Voltage		V _{DC}	20	30	40	50	60	80	90	100	Volts
Maximum Average Forward Rectified Current		I _(AV)	5.0								Amps
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)		I _{FSM}	120								Amps
Maximum Instantaneous Forward Voltage @ 5.0A(Note1)		V _F	0.55			0.70		0.85			Volts
Maximum DC Reverse Current at rated DC Blocking Voltage	T _A = 25℃	I _R	0.5								mA
	T _A =100℃		20.0			10.0					
Typical Thermal Resistance (Note 2)		R _{θJA}	55								℃/W
		R _{θJL}	12								
Operating Junction Temperature		T _J	(-55 to +125								℃
Storage Temperature Range		T _{STG}	(-55 to +150)								℃

Notes:

- 1.Pulse test: 300 μ s pulse width,1% duty cycle
- 2.PCB mounted with 0.55"×0.55"(14mm×14mm) copper pads



FIG.1-TYPICAL FORWARD CURRENT
DERATING CURVE

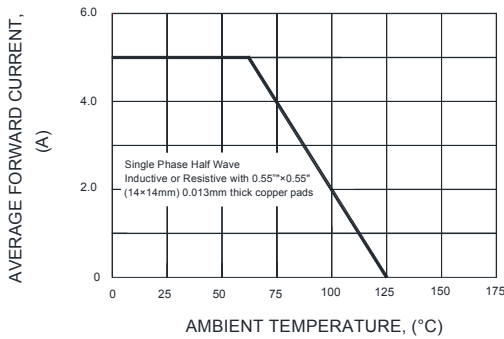


FIG.2-MAXIMUM NON-REPETITIVE PEAK
FORWARD SURGE CURRENT

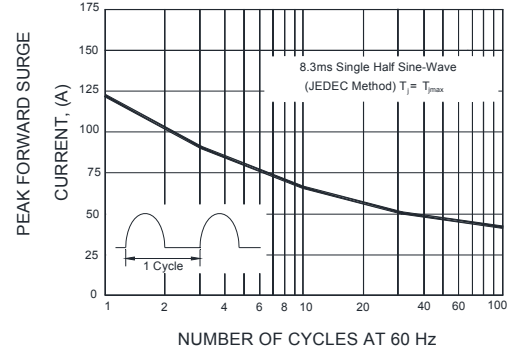


FIG.3-TYPICAL INSTANTANEOUS
FORWARD CHARACTERISTICS

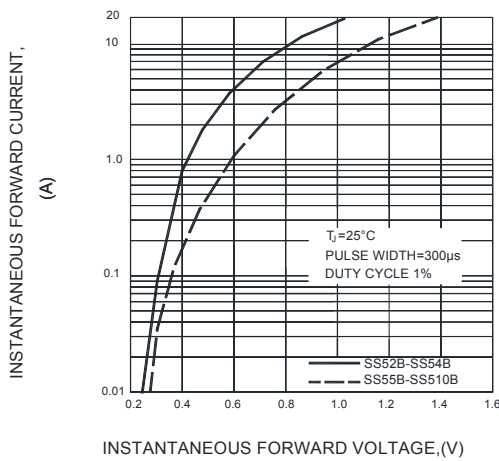


FIG.4-TYPICAL REVERSE
CHARACTERISTICS

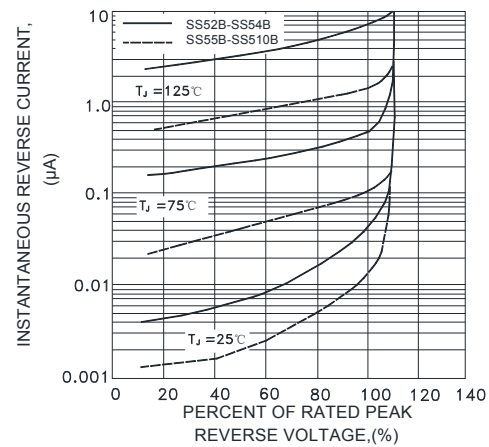


FIG.5-TYPICAL JUNCTION CAPACITANCE

