

### FEATURES

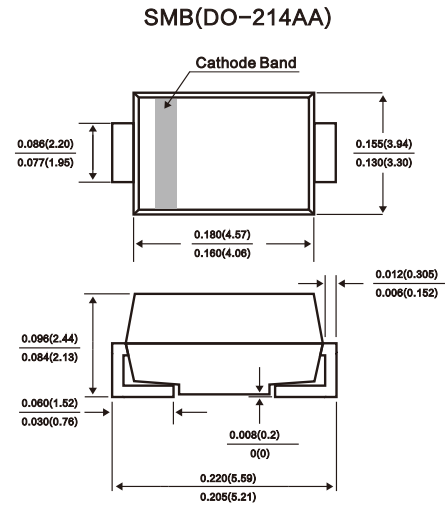
- Metal-Semiconductor junction with gard ring
- Epitaxial construction
- Low forward voltage drop
- High current capability
- The plastic material carries UL recognition 94V-0
- For use in low vlotage, high frequency inverters, free wheeling, and polarity protection applications

### MECHANICAL DATA

Case SMB/DO-214AA Molded Plastic

Polarity:Color band denotes cathode

Weight: 0.007 ounces,0.21 grams



Dimensions in inches and (millimeters)

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave ,60Hz, resistive or inductive load.

For capacitive load, derate current by 20%

CHARACTERISTICS	SYMBOL	SS52	SS53	SS54	SS55	SS56	SS58	SS510	UNIT
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	20	30	40	50	60	80	100	V
Maximum RMS Voltage	V <sub>RMS</sub>	14	21	28	35	42	56	70	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	20	30	40	50	60	80	100	V
Maximum Average Forward Rectified Current 0.375" (9.5mm) Lead Lengths @T <sub>L</sub> =95 °C	I <sub>(AV)</sub>	5.0							A
Peak Forward Surage Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load(JEDEC Method)	I <sub>FSM</sub>	150							A
Maximum Forward Voltage at 5.0A DC	V <sub>F</sub>	0.45	0.55	0.6	0.7		0.85		V
Maximum DC Reverse Current @T <sub>J</sub> =25°C at Rated DC Bolcking Voltage @T <sub>J</sub> =100°C	I <sub>R</sub>	1.0 50							mA
Typical Junction Capacitance (Note1)	C <sub>J</sub>	500			350			pF	
Typical Thermal Resistance (Note2)	R <sub>JA</sub>	15			10			°C/W	
Operating Temperature Range	T <sub>J</sub>	-55 to +150							°C
Storage Temperature Range	T <sub>STG</sub>	-55 to +150							°C

NOTES: 1.Measured at 1.0 MHz and applied reverse voltage of 4.0V DC

2.Thermal resistance junction to ambient,

FIG. 1 FORWARD CURRENT DERATING CURVE

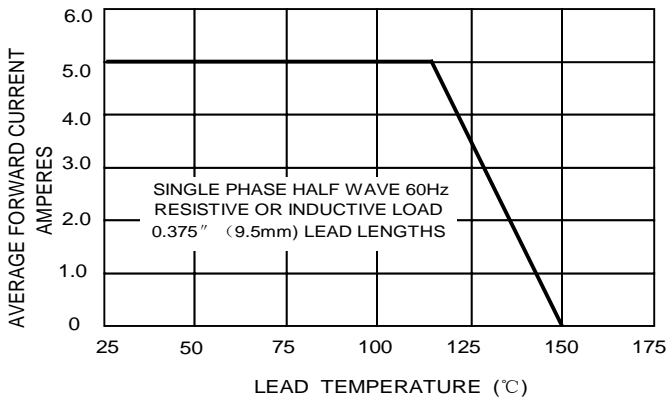


FIG. 2 MAXIMUM NON-REPETITIVE SURGE CURRENT

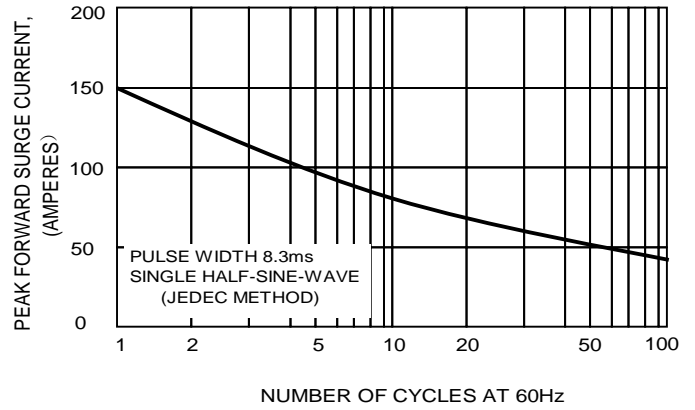


FIG. 3 TYPICAL JUNCTION CAPACITANCE

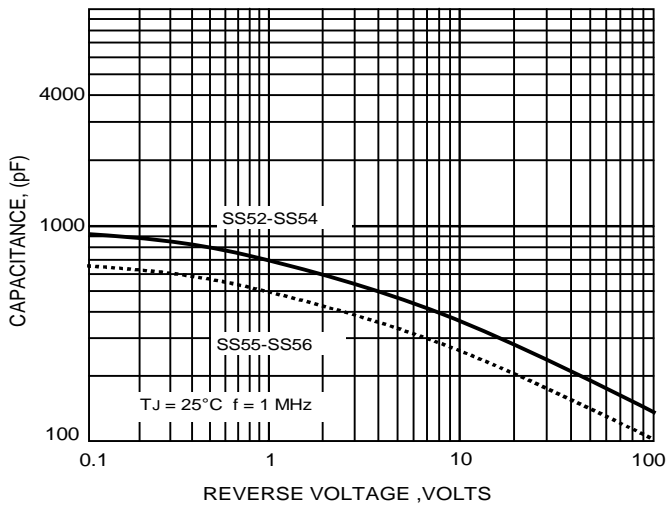


FIG. 4 TYPICAL FORWARD CHARACTERISTICS

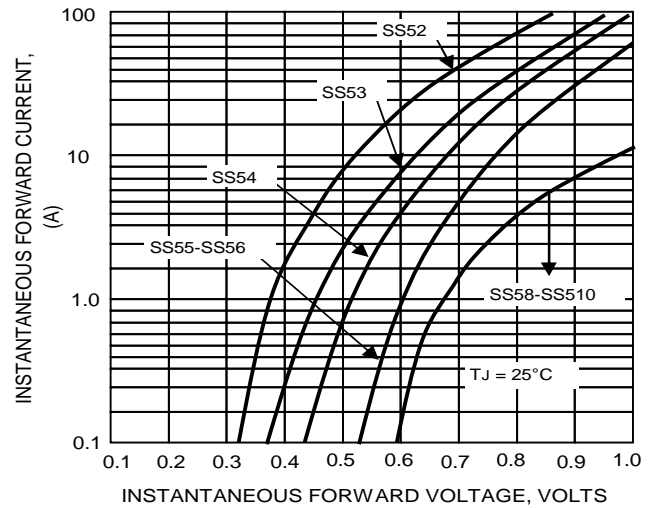


FIG. 2-TYPICAL REVER CHARACTERISTICS

