

### FEATURES

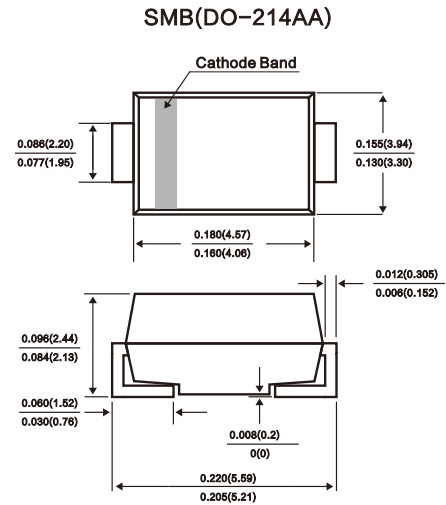
- Metal-Semiconductor junction with gard ring
- Epitaxial construction
- Low forward voltage drop
- High current capability
- The plastic material carries UL recognition 94V-0
- For use in low vlotage, high frequency inverters, free wheeling, and polarity protection applications

### 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	$V_{RRM}$	20	30	40	50	60	80	100	V
Maximum RMS Voltage	$V_{RMS}$	14	21	28	35	42	56	70	V
Maximum DC Blocking Voltage	$V_{DC}$	20	30	40	50	60	80	100	V
Maximum Average Forward Rectified Current 0.375" (9.5mm) Lead Lengths @ $T_L=95^\circ C$	$I_{(AV)}$	5.0							A
Peak Forward Surage Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load(JEDEC Method)	$I_{FSM}$	150							A
Maximum Forward Voltage at 5.0A DC	$V_F$	0.45	0.55	0.6	0.7		0.85		V
Maximum DC Reverse Current @ $T_J=25^\circ C$ at Rated DC Bolcking Voltage @ $T_J=100^\circ C$	$I_R$	1.0 50							mA
Typical Junction Capacitance (Note1)	$C_J$	500			350			pF	
Typical Thermal Resistance (Note2)	$R_{JA}$	15			10			$^\circ C/W$	
Operating Temperature Range	$T_J$	-55 to +150							$^\circ C$
Storage Temperature Range	$T_{STG}$	-55 to +150							$^\circ C$

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

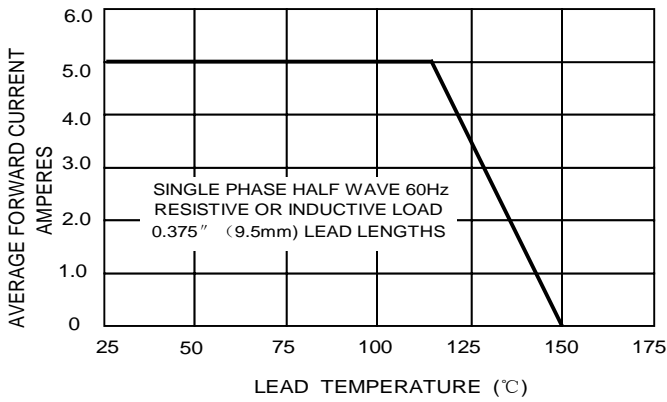


FIG. 2 MAXIMUM NON-REPETITIVE SURGE CURRENT

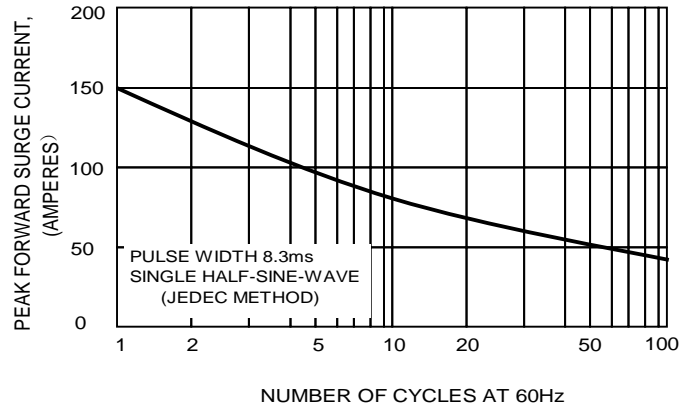


FIG.3 TYPICAL JUNCTION CAPACITANCE

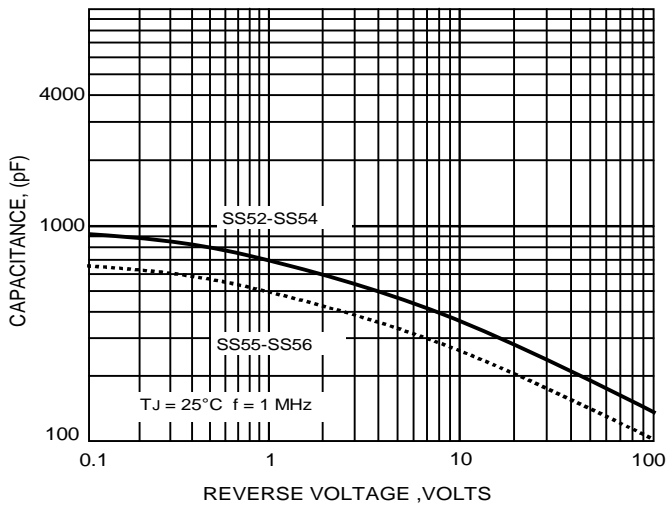


FIG.4-TYPICAL FORWARD CHARACTERISTICS

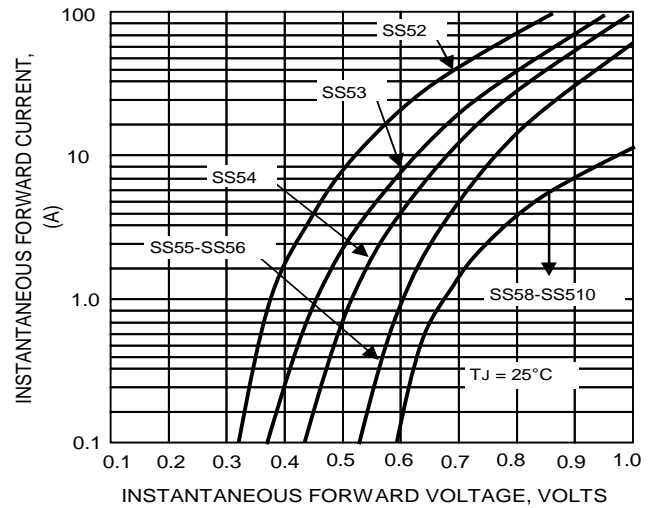


FIG.2-TYPICAL REVER CHARACTERISTICS

