

SS52 THUR SS510

SS52 THUR SS510 Schottky Barrier Rectifiers

General description

5.0Amp Surface Mounted Schottky Barrier Rectifiers

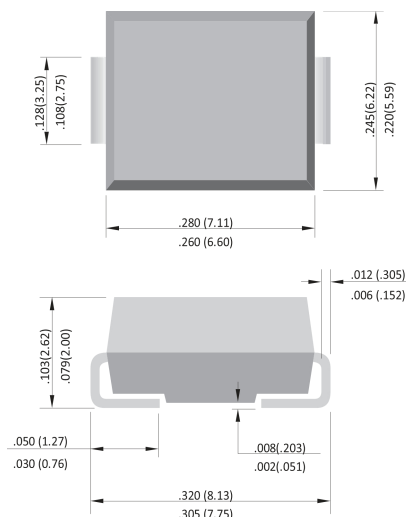
FEATURES

- Flammability Classification 94V-O
- Plastic package has Underwriters Laboratory
- For surface mounted applications
- Built-in strain relief
- High surge capacity

MECHANICAL DATA

- Case: JEDEC DO-214AB molded plastic
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode
- Weight: 0.007 ounce, 0.25 gram

SMC/DO214AB



Unit: inch (mm)

Maximum Ratings And Electrical Characteristics

Characteristic	Symbol	SS52	SS53	SS54	SS55	SS56	SS58	SS59	SS510	Unit
Peak Repetitive Reverse Voltage	V_{RRM}									
Working Peak Reverse Voltage	V_{RWM}	20	30	40	50	60	80	90	100	V
DC Blocking Voltage	V_R									
RMS Reverse Voltage	$V_{R(RMS)}$	14	21	28	35	42	56	64	70	V
Average Rectified Output Current	I_O	5.0								A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	150								A
Forward Voltage @ $I_F = 5.0A$	V_{FM}	0.45	0.55	0.6	0.7	0.85			V	
Peak Reverse Current @ $T_A = 25^\circ C$ At Rated DC Blocking Voltage @ $T_A = 100^\circ C$	I_{RM}	1 50								mA
Typical Thermal Resistance Junction to Ambient (Note 1)	R_{JA}	15								$^\circ C/W$
Typical junction capacitance	C_J	500				350				pF
Operating Temperature Range	T_j	-55 to +150								$^\circ C$
Storage Temperature Range	T_{STG}	-55 to +150								$^\circ C$

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

2.Thermal resistance junction to ambient

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Rating And Characteristic Curves

FIG. 1- FORWARD CURRENT DERATING CURVE

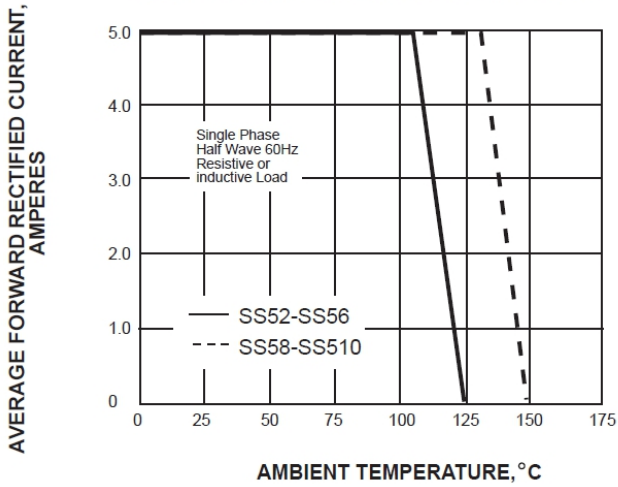


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

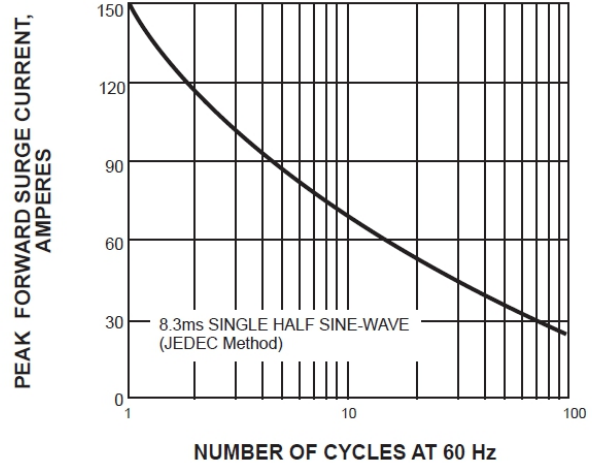


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

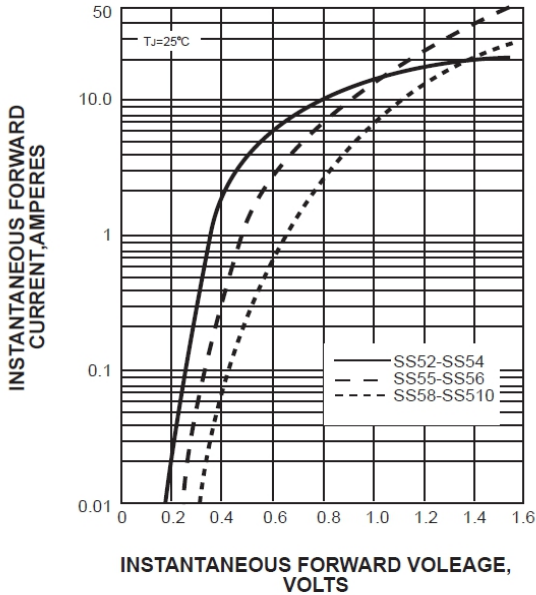


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

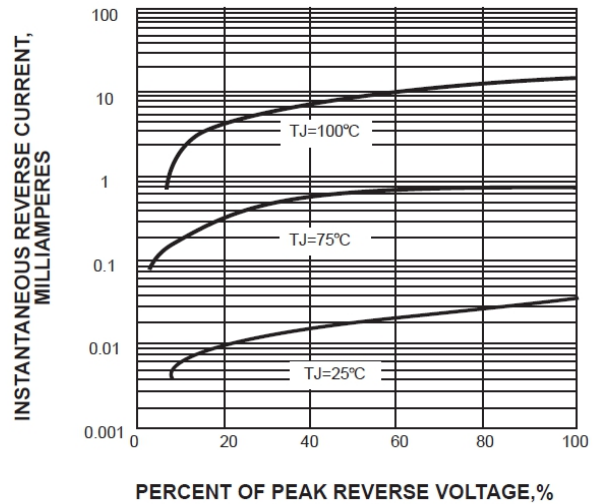


FIG. 5-TYPICAL JUNCTION CAPACITANCE

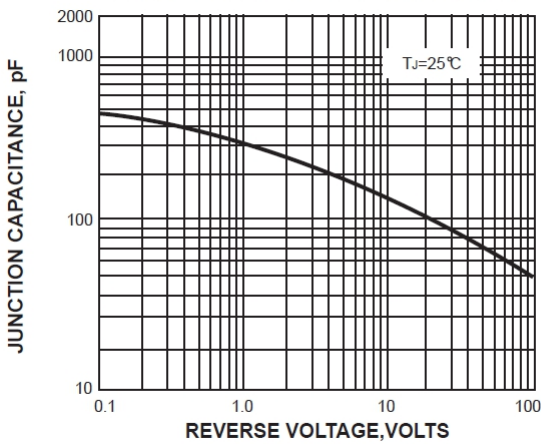
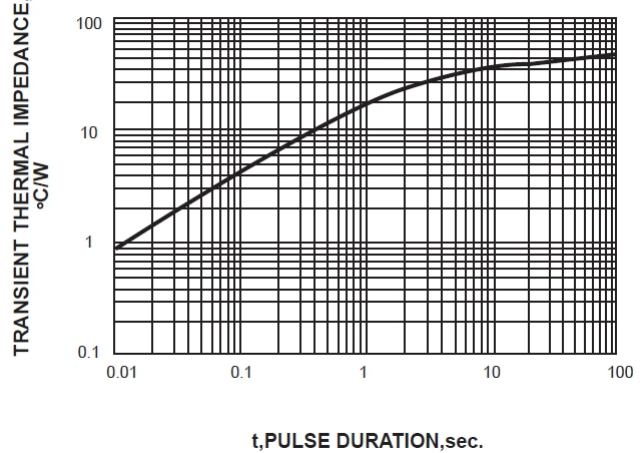


FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE



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