

**SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER
SS52 THRU SS56**

VOLTAGE RANGE 20 to 60 Volts
Forward Current 5.0 Amperes

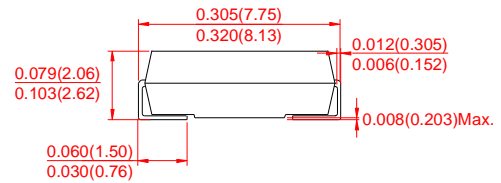
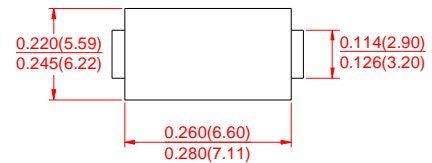
FEATURES

- l For surface mount applications
- l Metal-Semiconductor Junction with Guarding
- l Epitaxial Construction
- l Very Low forward voltage drop
- l High Current capability
- l For use in low voltage, high frequency inverters, Free wheeling, and polarity protection applications
- l High temperature soldering guaranteed: 250°C/10 seconds at terminals

MECHANICAL DATA

- l Case: Molded Plastic
- l Terminals: Solder Plated, Solderable per MIL-STD-750 Method 2026
- l Polarity: Color band denote Cathode end
- l Weight: 0.007ounce, 0.21 gram

SMC(DO-214AB)



Dimensions in inches and (millimeters)

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 by 20%.

	SYMBOLS	SS52	SS53	SS54	SS55	SS56	UNITS
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	20	30	40	50	60	Volts
Maximum RMS Voltage	V_{RMS}	14	21	28	35	42	Volts
Maximum DC Blocking Voltage	V_{DC}	20	30	40	50	60	Volts
Maximum Average Forward Rectified Current @ $T_L=90^\circ C$	$I_{(AV)}$	5.0					Amps
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	175					Amps
Maximum Forward Voltage at 5.0A DC @ $T_C=100^\circ C$	V_F	0.55			0.70		Volts
Maximum instantaneous Reverse Current at rated DC blocking voltage	$T_J=25^\circ C$	0.5					mA
	$T_J=100^\circ C$	20					
Typical Junction Capacitance (Note 1)	C_j	300					pF
Typical thermal capacitance (Note 2)	R_{QJL}	10					°C/W
Typical thermal capacitance (Note 2)	R_{QJA}	50					
Operating and Storage Temperature Range	T_J	-55 to +125					°C
Storage temperature range	T_{STG}	-55 to +150					

NOTES:

1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
2. Thermal Resistance Junction to Lead.



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RATING AND CHARACTERISTIC CURVES SS52 thru SS56

FIG.1-FORWARD CURRENT DERATING CURVE

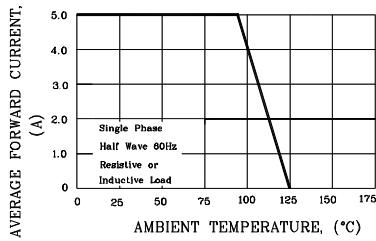


FIG.2-MAXIMUM NON-REPETITIVE SURGE CURRENT

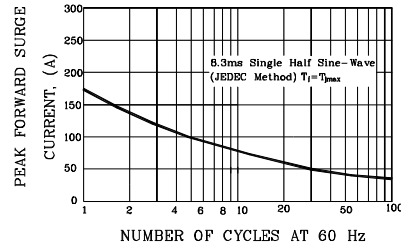


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

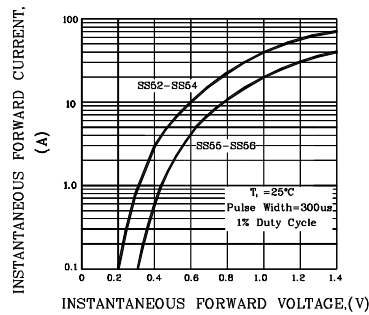


FIG.4-TYPICAL JUNCTION CAPACITANCE

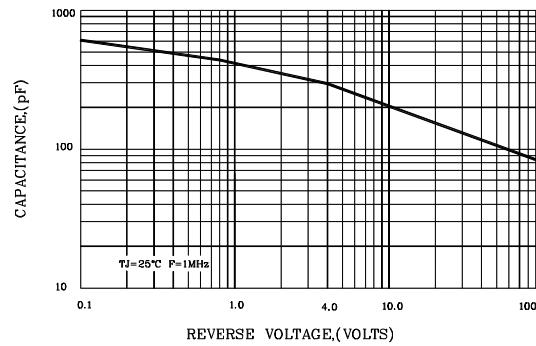


FIG.5-TYPICAL REVERSE CHARACTERISTICS

