

SS52 THRU SS510

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER
 VOLTAGE RANGE 20 to 100 Volts CURRENT 5.0 Ampere

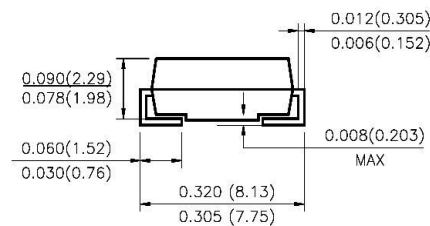
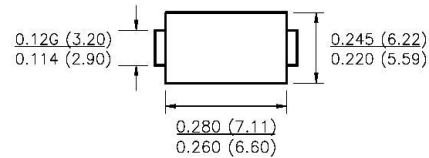
FEATURES

- ◆ 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
- ◆ Polarity: Indicated by cathode band
- ◆ Lead: Solder plated, solderable per MIL-STD-750 method 2026
- ◆ Polarity: Color band denotes cathode end
- ◆ Weight: 0.007 ounce, 0.25 gram

DO-214AB (SMC)



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%

PARAMETER	SYMBOL	SS52	SS53	SS54	SS55	SS56	SS58	SS59	SS510	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 at T _A =75°C	I(AV)	5.0								Amps	
Peak Forward Surge Current 8.3mS single half sine-wave superimposed on rated load (JEDEC method)	I _{FSM}	100								Amps	
Maximum Instantaneous Forward Voltage at 1.0A	V _F	0.55			0.75		0.85			Volts	
Maximum DC Reverse Current at rated DC Blocking Voltage	T _A = 25°C	I _R	0.5								mA
			T _A = 125°C	20.0			10.0				
Typical Thermal Resistance (Note 2)	R _{θJA}	55								°C/W	
	R _{θJL}	12									
Operating Junction Temperature	T _J	-55 to +150				-55 to +150					°C
Operating and Storage Temperature Range	T _{STG}	-55 to +150									°C

Note: 1. Pulse test: 300µs pulse width, 1% duty cycle

2. PCB mounted with 0.55"×0.55"(14mm×14mm) copper pads

SS52 THRU SS510

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER
 VOLTAGE RANGE 20 to 100 Volts CURRENT 5.0 Ampere

RATING AND CHARACTERISTIC CURVES SS52 THRU SS510

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

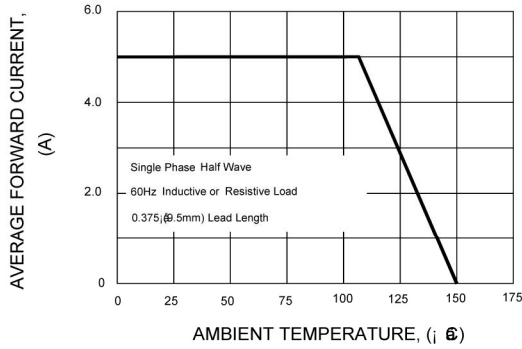


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

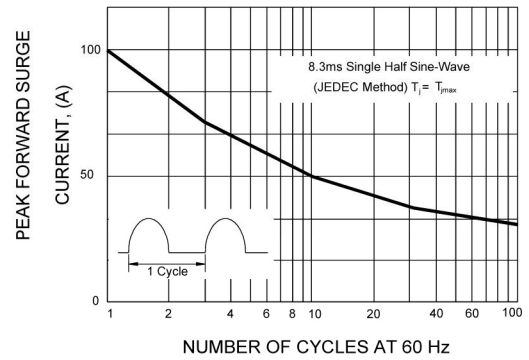


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

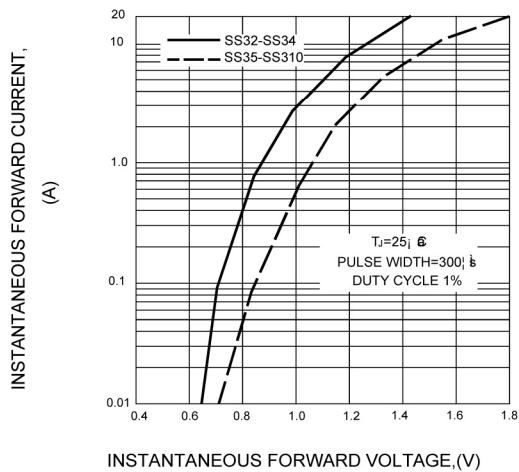


FIG.4-TYPICAL REVERSE CHARACTERISTICS

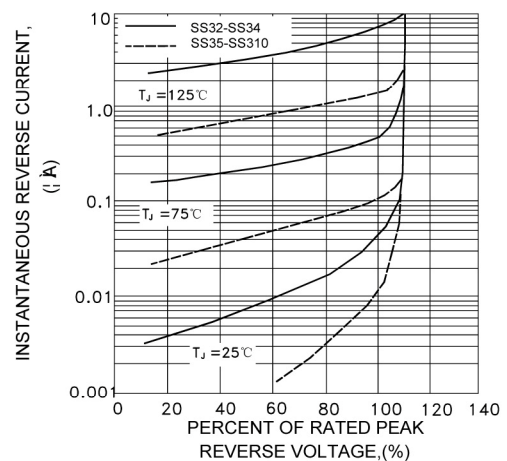
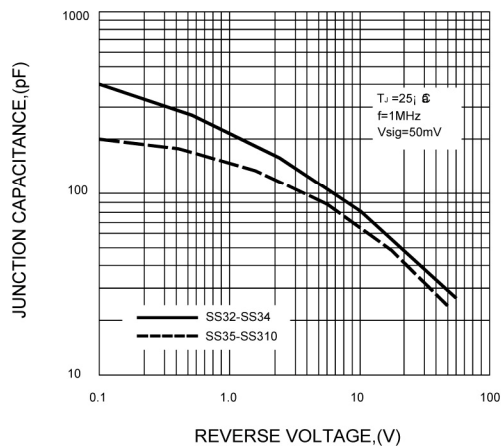


FIG.5-TYPICAL JUNCTION CAPACITANCE



Note: Specifications are subject to change without notice. For more detail and update, please visit our website.