

# SS32 THRU SS310

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER  
 VOLTAGE RANGE 20 to 100 Volts    CURRENT 3.0 Ampere

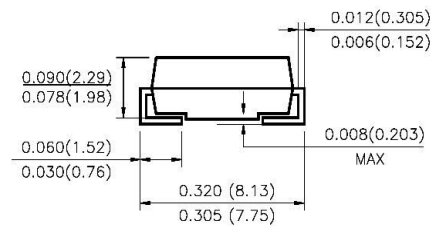
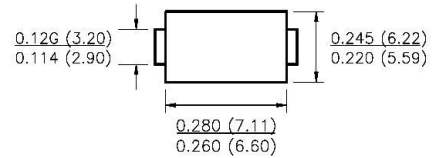
## FEATURES

- ◆ 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
- ◆ 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	SYMBOLS	SS32	SS33	SS34	SS35	SS36	SS38	SS39	SS310	UNIT	
Maximum Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	20	30	40	50	60	80	90	100	Volts	
Maximum RMS Voltage	V <sub>RMS</sub>	14	21	28	35	42	56	63	70	Volts	
Maximum DC Blocking Voltage	V <sub>DC</sub>	20	30	40	50	60	80	90	100	Volts	
Maximum Average Forward Rectified Current at TL see figure 1 TL =105°C	I <sub>(AV)</sub>	3.0								Amps	
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I <sub>FSM</sub>	80								Amps	
Maximum Instantaneous Forward Voltage @ 3.0A(Note1)	V <sub>F</sub>	0.55			0.75		0.85			Volts	
Maximum DC Reverse Current at rated DC Blocking Voltage per element	I <sub>R</sub>	0.5									uA
		20.0			10.0						
Typical Thermal Resistance (Note 2)	R <sub>θJA</sub>	55								°C/W	
	R <sub>θJL</sub>	12									
Operating Junction Temperature	T <sub>J</sub>	-55 to +150				-55 to +150					°C
Storage Temperature Range	T <sub>STG</sub>	-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

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## RATING AND CHARACTERISTIC CURVES SS32 THRU SS310

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

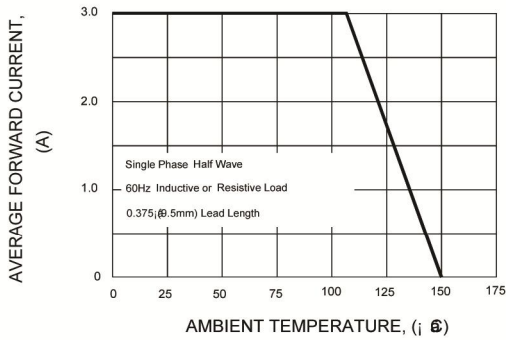


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

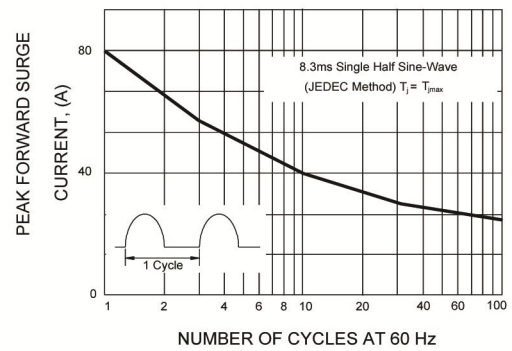


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

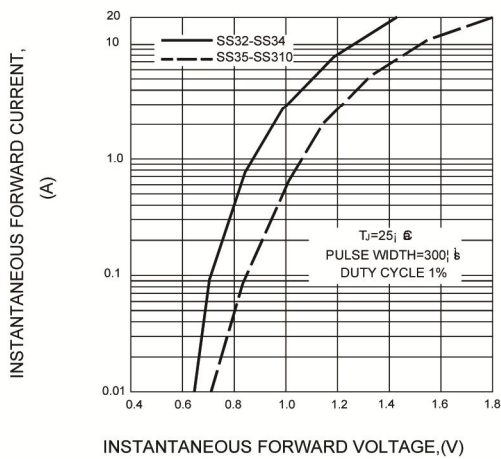


FIG.4-TYPICAL REVERSE CHARACTERISTICS

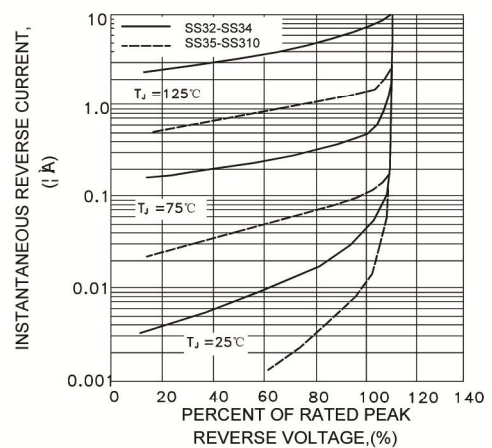
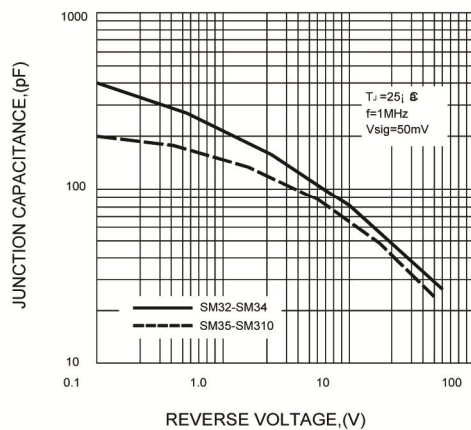


FIG.5-TYPICAL JUNCTION CAPACITANCE



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