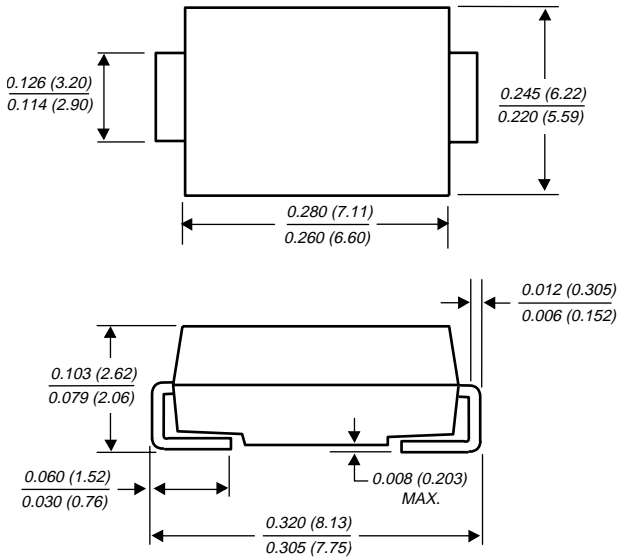


# SS32 THRU SS36

**SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER**  
*Reverse Voltage - 20 to 60 Volts      Forward Current - 3.0 Amperes*

## DO-214AB



Dimensions in inches and (millimeters)

## FEATURES

- ◆ Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- ◆ For surface mount applications
- ◆ Low profile package
- ◆ Built-in strain relief, ideal for automated placement
- ◆ Easy pick and place
- ◆ Metal silicon junction, majority carrier conduction
- ◆ Low power loss, high efficiency
- ◆ High current capability, low forward voltage drop
- ◆ For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications
- ◆ High temperature soldering: 250°C/10 seconds at terminals



## MECHANICAL DATA

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

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

	SYMBOLS	SS32	SS33	SS34	SS35	SS36	UNITS
Device marking code		S2	S3	S4	S5	S6	
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	20	30	40	50	60	Volts
Maximum RMS voltage	V <sub>RMS</sub>	14	21	28	35	42	Volts
Maximum DC blocking voltage	V <sub>DC</sub>	20	30	40	50	60	Volts
Maximum average forward rectified current at T <sub>L</sub> (SEE FIG. 1) (NOTE 2)	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>	100.0					Amps
Maximum instantaneous forward voltage at 3.0A (NOTE 1)	V <sub>F</sub>	0.50			0.75		Volts
Maximum DC reverse current (NOTE 1) T <sub>A</sub> =25°C at rated DC blocking voltage T <sub>A</sub> =100°C	I <sub>R</sub>	0.5			10.0		mA
Typical thermal resistance (NOTE 2)	R <sub>θJA</sub>	55.0					°C/W
	R <sub>θJL</sub>	17.0					
Operating junction temperature range	T <sub>J</sub>	-55 to +125			-55 to +150		°C
Storage temperature range	T <sub>STG</sub>	-55 to +150					°C

### NOTES:

- (1) Pulse test: 300µs pulse width, 1% duty cycle
- (2) P.C.B. mounted 0.55 x 0.55" (14 x 14mm) copper pad areas

# RATINGS AND CHARACTERISTIC CURVES SS32 THRU SS36

FIG. 1 - FORWARD CURRENT DERATING CURVE

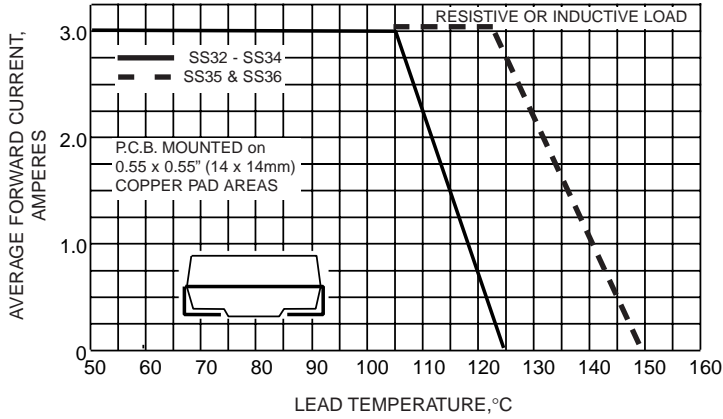


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

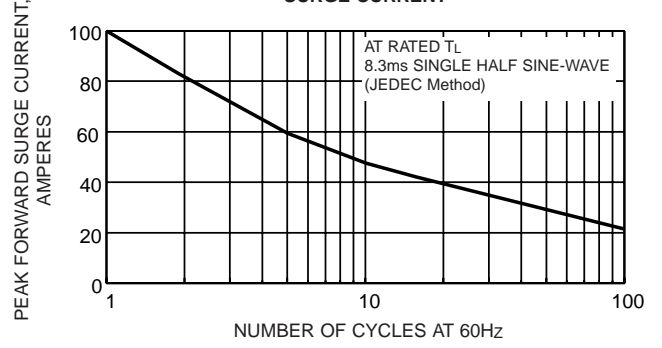


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

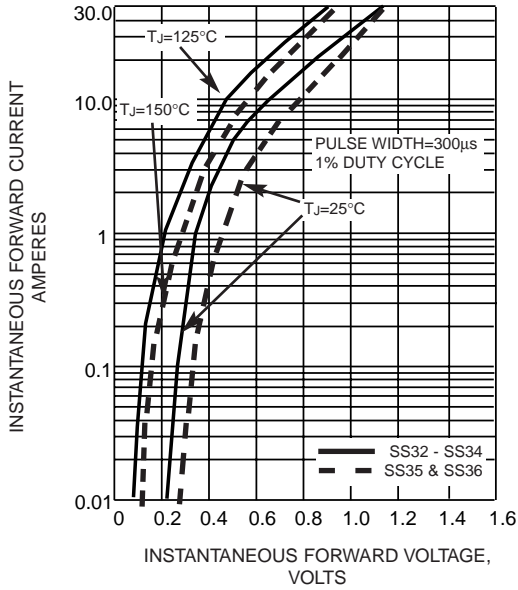


FIG. 4 - TYPICAL REVERSE CURRENT CHARACTERISTICS

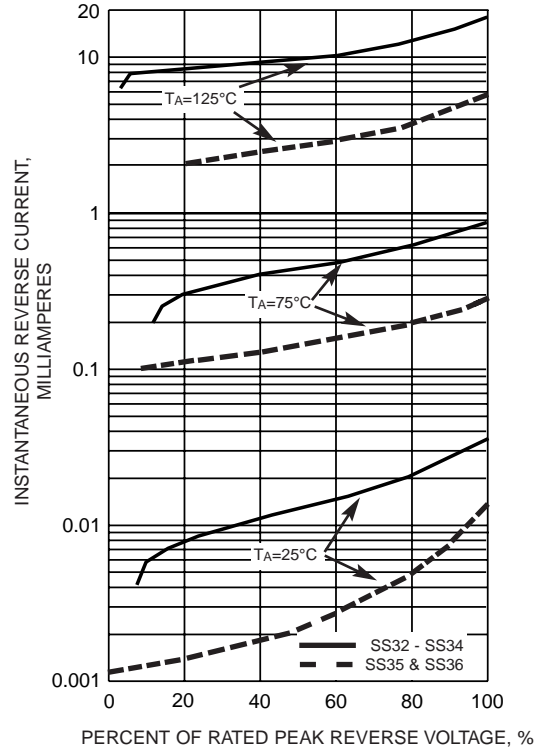


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

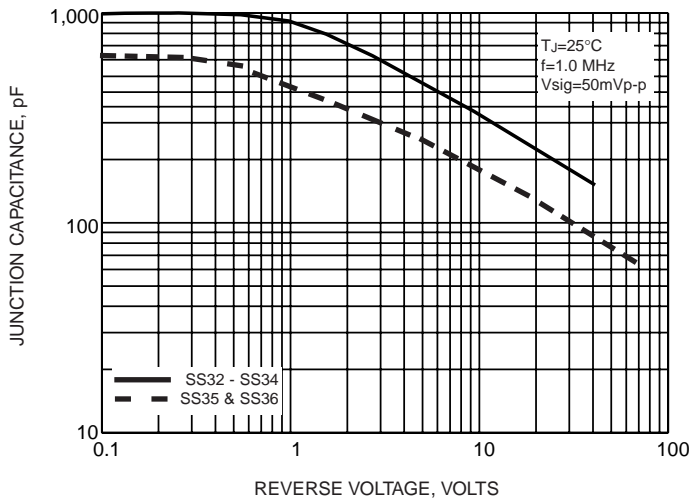


FIG. 6 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

