

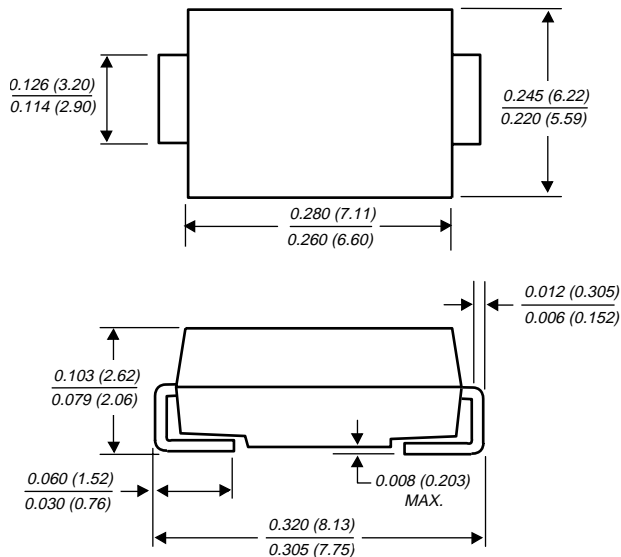
# SS32 THRU SS36

## 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	VRRM	20	30	40	50	60	Volts
Maximum RMS voltage	VRMS	14	21	28	35	42	Volts
Maximum DC blocking voltage	VDC	20	30	40	50	60	Volts
Maximum average forward rectified current at T <sub>L</sub> (SEE FIG. 1) (NOTE 2)	I(AV)	3.0					Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	IFSM	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	I <sub>R</sub>	0.5					mA
at rated DC blocking voltage T <sub>A</sub> =100°C		20.0			10.0		
Typical thermal resistance (NOTE 2)	R <sub>ΘJA</sub> R <sub>ΘJL</sub>	55.0 17.0					°C/W
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

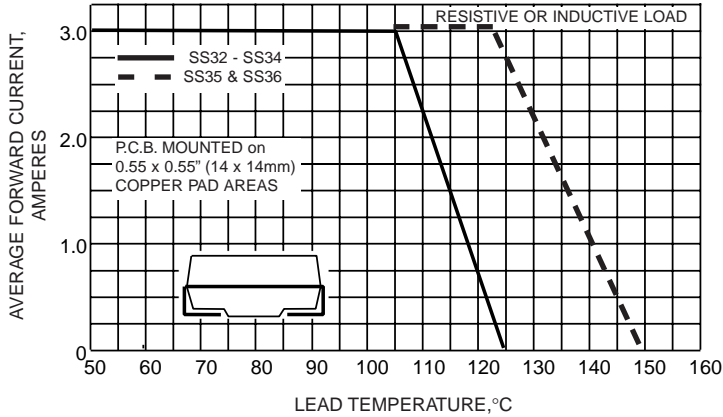


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

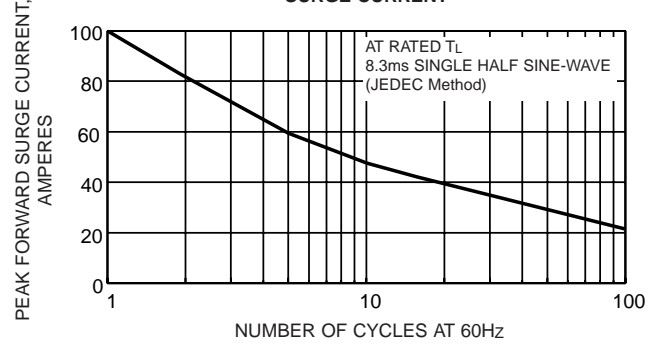


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

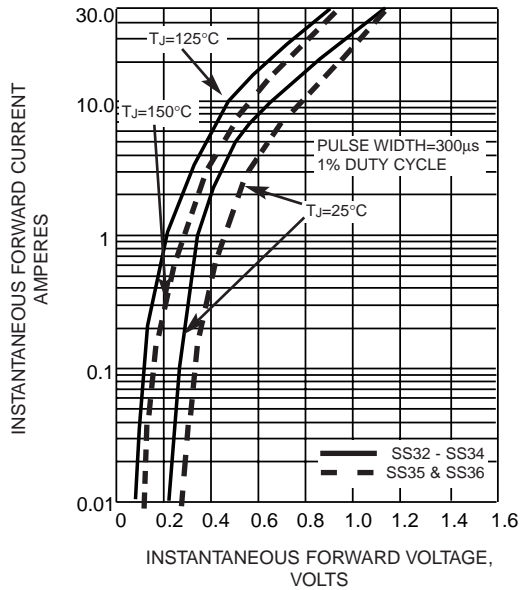


FIG. 4 - TYPICAL REVERSE CURRENT CHARACTERISTICS

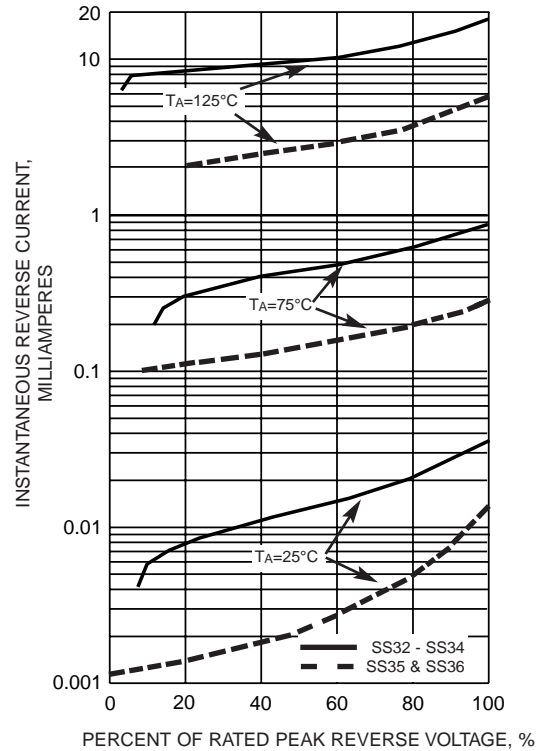


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

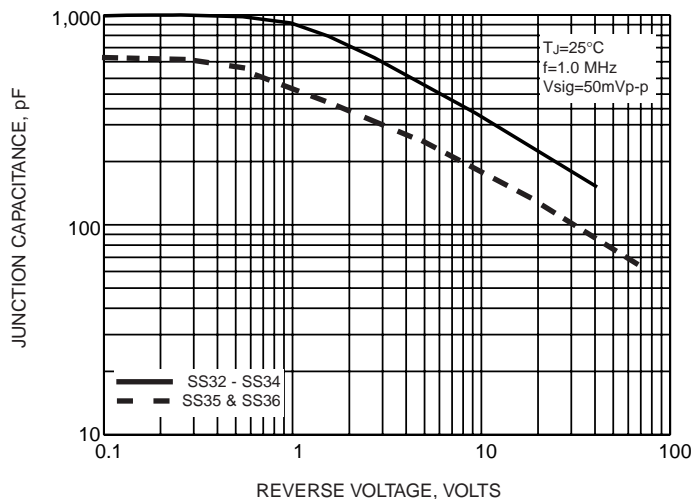


FIG. 6 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

