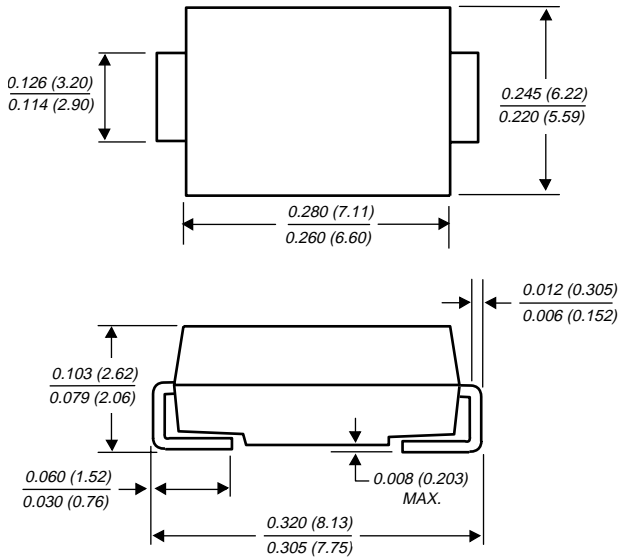


SS32 THRU SS36

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 _{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 at T _L (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)	I _{FSM}	100.0					Amps
Maximum instantaneous forward voltage at 3.0A (NOTE 1)	V _F	0.50			0.75		Volts
Maximum DC reverse current (NOTE 1) T _A =25°C at rated DC blocking voltage T _A =100°C	I _R	0.5			10.0		mA
Typical thermal resistance (NOTE 2)	R _{θJA}	55.0					°C/W
	R _{θJL}	17.0					
Operating junction temperature range	T _J	-55 to +125			-55 to +150		°C
Storage temperature range	T _{STG}	-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

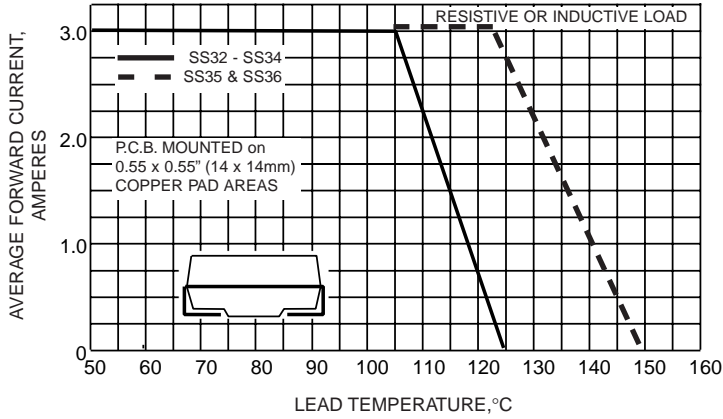


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

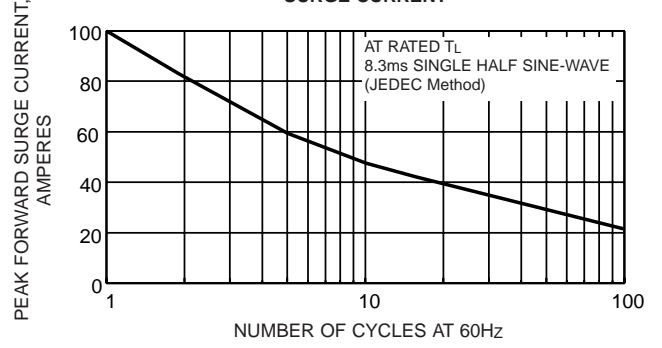


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

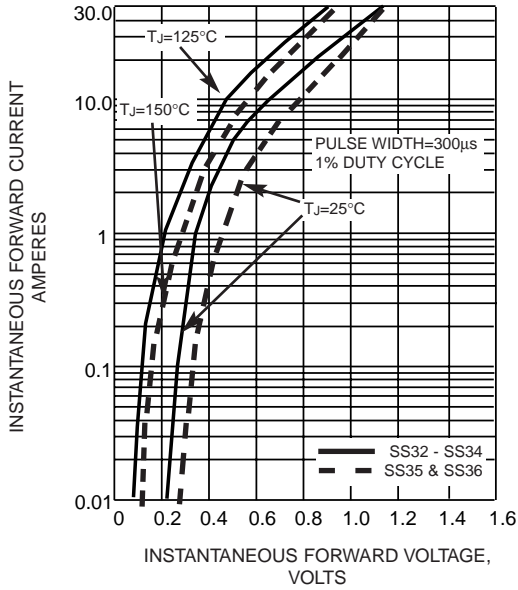


FIG. 4 - TYPICAL REVERSE CURRENT CHARACTERISTICS

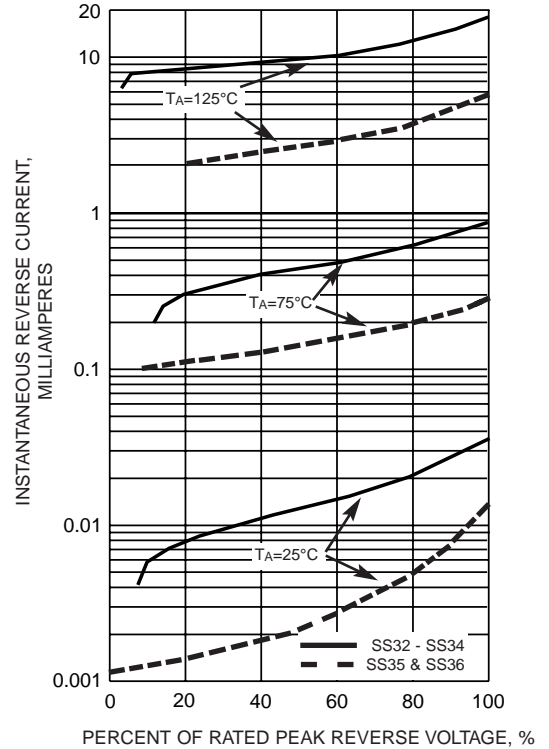


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

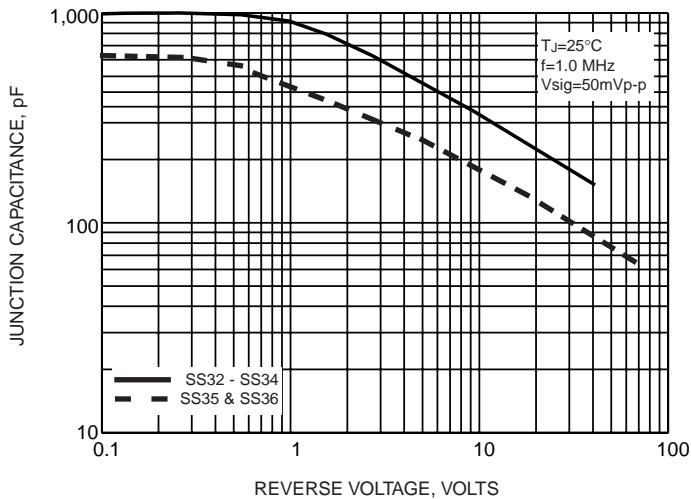


FIG. 6 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

