

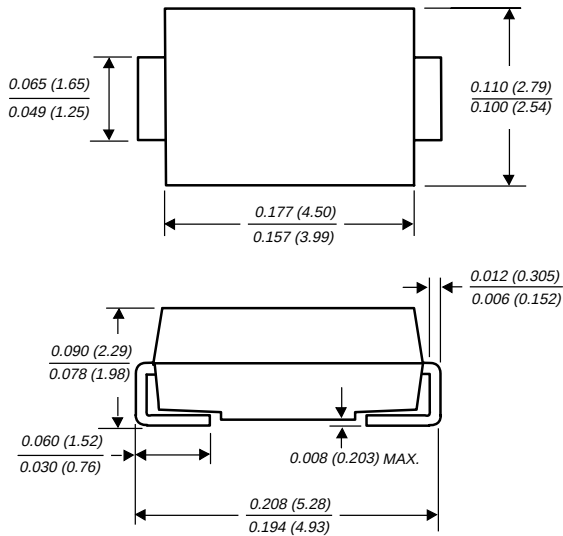
SS12 THRU SS16

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

Reverse Voltage - 20 to 60 Volts

Forward Current - 1.0 Ampere

DO-214AC



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
- ◆ Metal silicon junction, majority carrier conduction
- ◆ Low power loss, high efficiency
- ◆ High current capability, low forward voltage drop
- ◆ High surge capability
- ◆ For use in low voltage high frequency inverters, free wheeling, and polarity protection applications
- ◆ Guardring for overvoltage protection
- ◆ High temperature soldering guaranteed: 250°C/10 seconds on terminals



MECHANICAL DATA

Case: JEDEC DO-214AC molded plastic body

Terminals: Solder plated, solderable per MIL-STD-750, Method 2026

Polarity: Color band denotes cathode end

Weight: 0.002 ounce 0.064 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

	SYMBOLS	SS12	SS13	SS14	SS15	SS16	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 _L (SEE FIG. 1)	I(AV)	1.0					Amp
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	IFSM	40.0					Amps
Maximum instantaneous forward voltage at 1.0A (NOTE 1)	VF	0.50			0.75		Volts
Maximum DC reverse current (NOTE 1) at rated DC blocking voltage	TA=25°C TA=100°C IR	0.2					mA
		6.0			5.0		
Typical thermal resistance (NOTE 2)	RθJA RθJL	88.0 28.0					°C/W
Operating junction temperature range	TJ	-65 to +125			-65 to +150		°C
Storage temperature range	TSTG	-65 to +150					°C

NOTES:

(1) Pulse test: 300μs pulse width, 1% duty cycle

(2) P.C.B. mounted with 0.2 x 0.2" (5.0 x 5.0mm) copper pad areas

RATINGS AND CHARACTERISTIC CURVES SS12 THRU SS16

FIG. 1 - FORWARD CURRENT DERATING CURVE

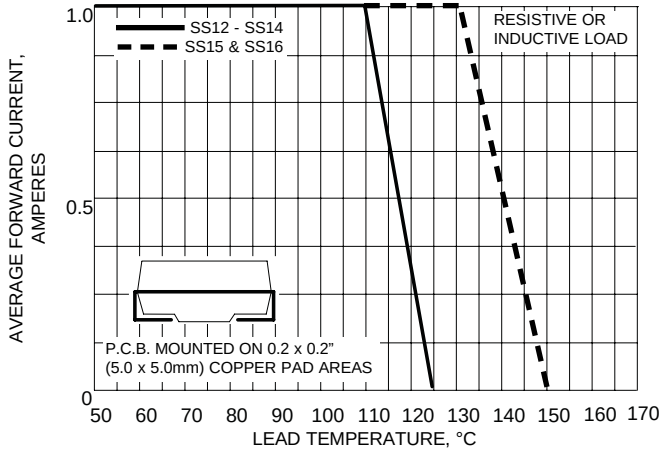


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

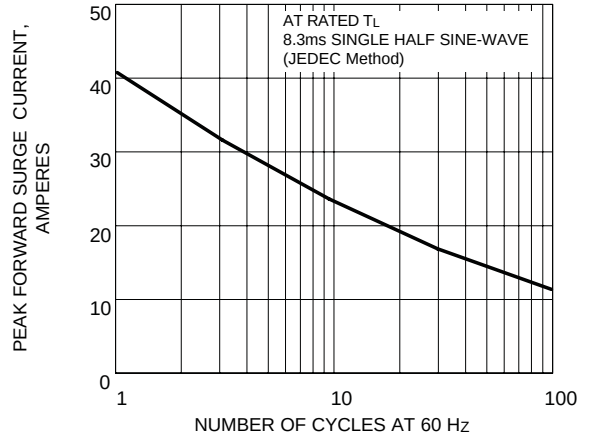


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

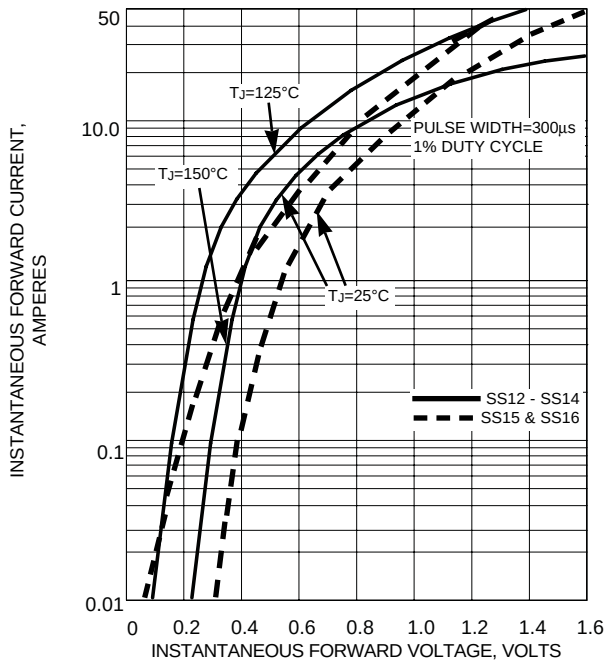


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

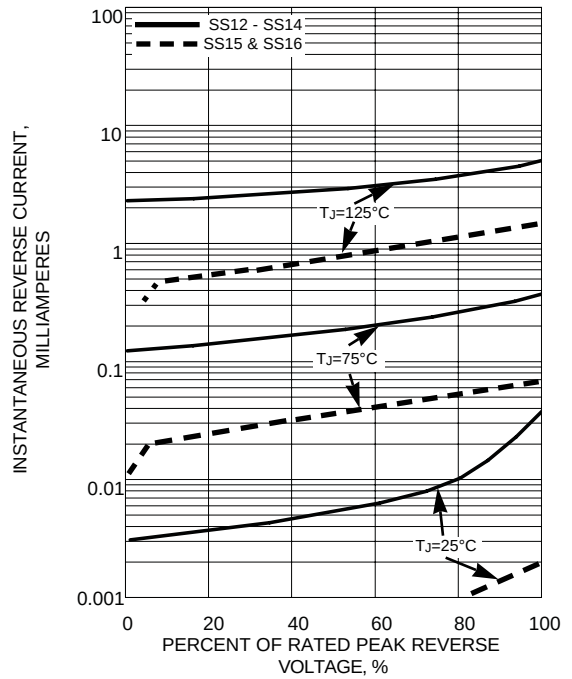


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

