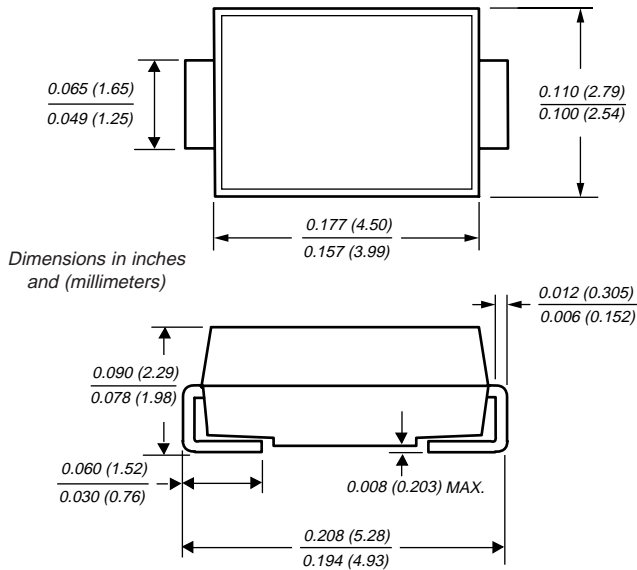
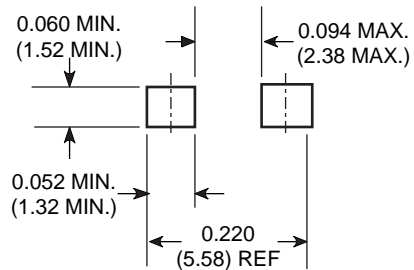



DO-214AC (SMA)

Surface Mount Schottky Barrier Rectifier

Reverse Voltage 20 to 60V
Forward Current 1.0A
**Mounting Pad Layout
DO-214AC**


Mechanical Data

Case: JEDEC DO-214AC molded plastic body

Terminals: Solder plated, solderable per MIL-STD750, Method 2026

Polarity: Color band denotes cathode end

Weight: 0.002 ounce, 0.064 gram

Features

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Low profile surface mount package
- Built-in strain relief
- Low power loss, high efficiency
- 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 at terminals

Maximum Ratings and Thermal Characteristics (T_A = 25°C unless otherwise noted)

	SYMBOLS	SS12	SS13	SS14	SS15	SS16	UNITS
Device marking code		S2	S3	S4	S5	S6	V
Maximum repetitive peak reverse voltage	V _{RRM}	20	30	40	50	60	V
Maximum RMS voltage	V _{RMS}	14	21	28	35	42	V
Maximum DC blocking voltage	V _{DC}	20	30	40	50	60	V
Maximum average forward rectified current at T _L (SEE FIG. 1)	I _{F(AV)}	1.0					A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	40					A
Typical thermal resistance (NOTE 2)	R _{θJA} R _{θJL}	88 28					°C/W
Operating junction temperature range	T _J	-65 to +125			-65 to +150		°C
Storage temperature range	T _{STG}	-65 to +150					°C

Electrical Characteristics (T_A = 25°C unless otherwise noted)

	SYMBOLS	SS12	SS13	SS14	SS15	SS16	UNITS
Maximum instantaneous forward voltage at 1.0A (NOTE 1)	V _F	0.50			0.75		V
Maximum DC reverse current (NOTE 1) T _A =25°C at rated DC blocking voltage T _A =100°C	I _R	0.2				5.0	mA
		6.0					

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

Surface Mount Schottky Barrier Rectifier

Ratings and Characteristic Curves ($T_A = 25^\circ\text{C}$ unless otherwise noted)

FIG. 1 - FORWARD CURRENT DERATING CURVE

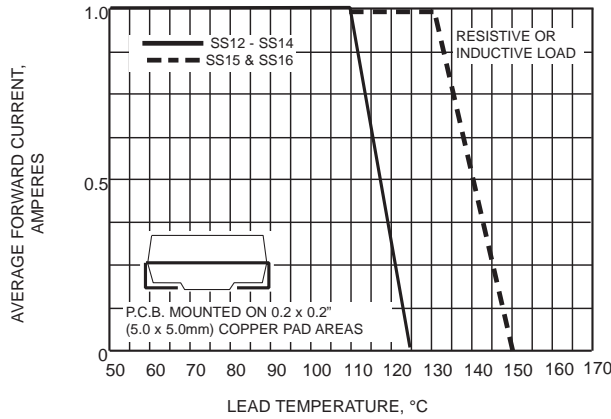


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

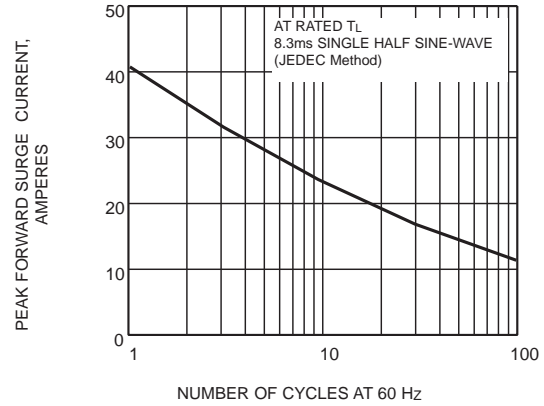


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

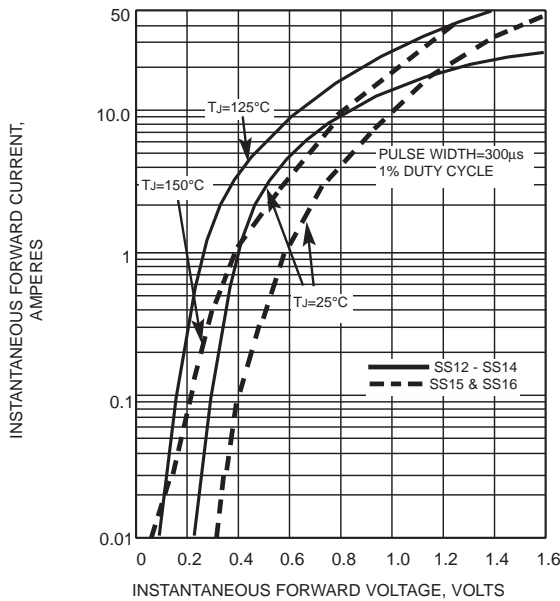


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

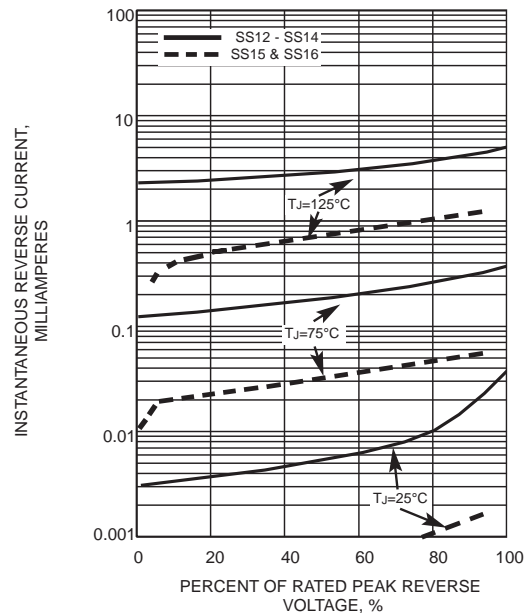


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

