



SS12 THRU SS16

**1.0 AMP. SURFACE MOUNT
SCHOTTKY BARRIER
RECTIFIERS**

Voltage Range
20 to 60 Volts
Current
1.0 Amperes

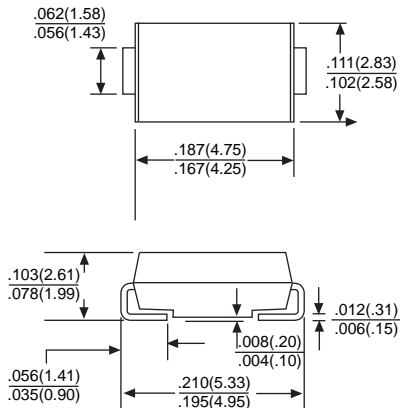
SMA/DO-214AC

Features

- *For surface mounted application
- *Metal to silicon rectifier, majority carrier conduction
- *Low forward voltage drop
- *Easy pick and place
- *High surge current capability
- *Plastic material used carriers Underwriters
Laboratory Classification 94V-0
- *Epitaxial construction
- *High temperature soldering:
250°C/ 10 seconds at terminals

Mechanical Data

- *Case: Molded plastic
- *Terminals: Solder plated
- *Polarity: Indicated by cathode band
- *Packaging: 12mm tape per EIA STD RS-481
- *Weight: 0.064 gram



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.
Single phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%

Type Number		SS12	SS13	SS14	SS15	SS16	UNITS
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, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I _{FSM}	40					A
Maximum Instantaneous Forward Voltage (Note 1) @ 1.0A	V _F	0.5			0.75		V
Maximum DC Reverse Current @ T _A = 25°C at Rated DC Blocking Voltage @ T _A = 100°C	I _R	0.5					mA
		10			5.0		
Typical Thermal Resistance	R _{JL} R _{JA}	28 88					°C/W °C/W
Operating Junction Temperature Range	T _J	-55 to +125					°C
Storage Temperature Range	T _{STG}	-55 to +150					°C

NOTES: 1. Pulse Test with PW=300 usec, 1% Duty Cycle
2. Measured on P.C. Board with 0.2 x 0.2" (5.0 x 5.0mm) Copper Pad Areas.

RATING AND CHARACTERISTIC CURVES SS12 THRU SS16



FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

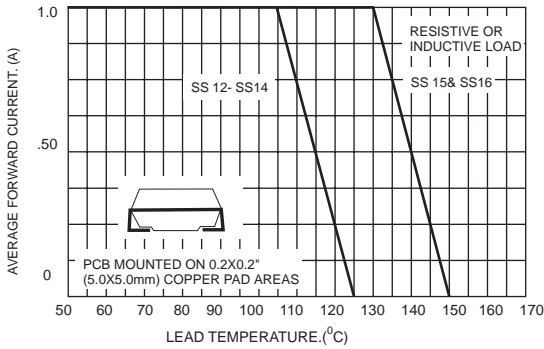


FIG.2- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

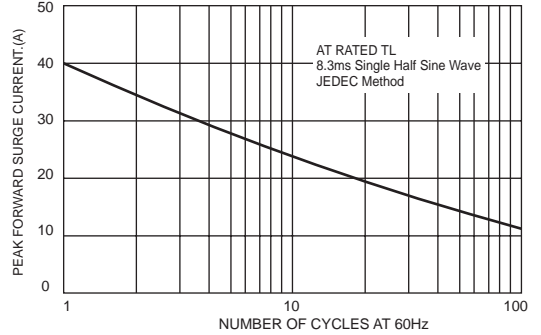


FIG.3-TYPICAL FORWARD CHARACTERISTICS

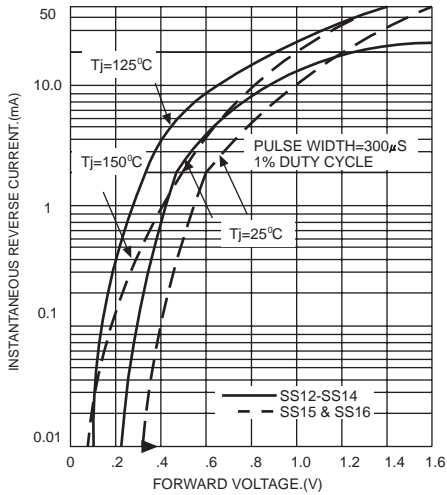


FIG.4-TYPICAL REVERSE CHARACTERISTICS

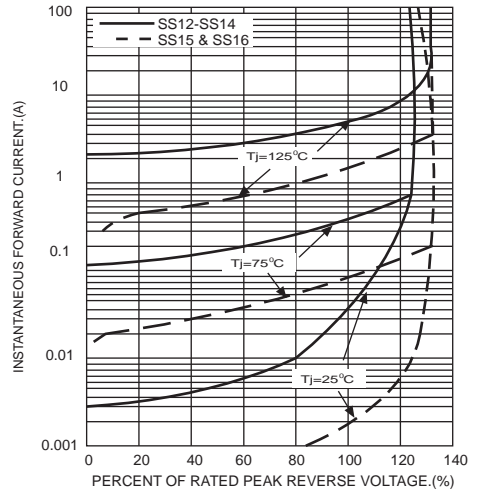


FIG.5-TYPICAL JUNCTION CAPACITANCE

