SS12 THRU SS16

1.0 AMP. SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS

Voltage Range
20 to 60 Volts
Current
1.0 Amperes

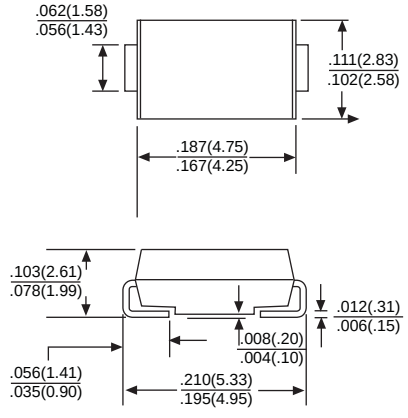
Features

*For surface mounted application
*Metal to silicon rectifier,majority carrier conduction
*Low forward voltage drop
*Easy pick and place
*High surge current capability
*Plastic materal used carriers Underwriters
Laboratory Classification 94V-O
*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

SMA/DO-214AC



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
Maximun DC Reverse Current @ T_A = 25°C	I_R	0.5					mA
at Rated DC Blocking Voltage @ T_A = 100°C		10			5.0		mA
Typical Thermal Resistance	R^*_{JL}	28					°C/W
	R^*_{JA}	88					°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 x5.0mm) Copper Pad Areas.

RATING AND CHARACTERISTIC CURVES
SS12 THRU SS16

FIG.1- MAXIMUN FORWARD CURRENT DERATING CURVE

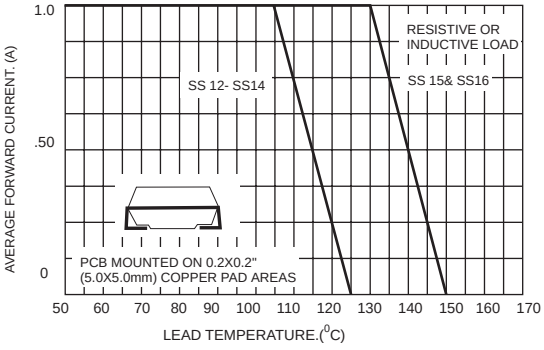


FIG.2- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

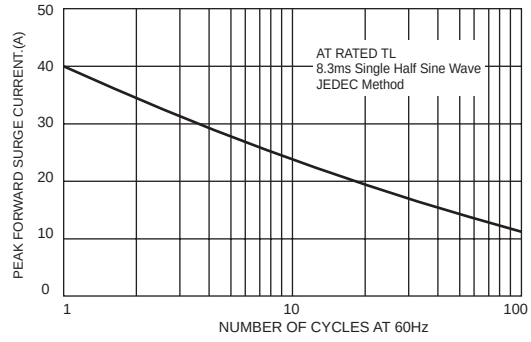


FIG.3-TYPICAL FORWARD CHARACTERISTICS

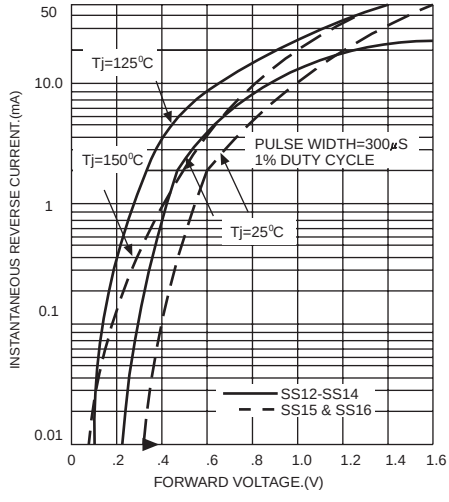


FIG.4-TYPICAL REVERSE CHARACTERISTICS

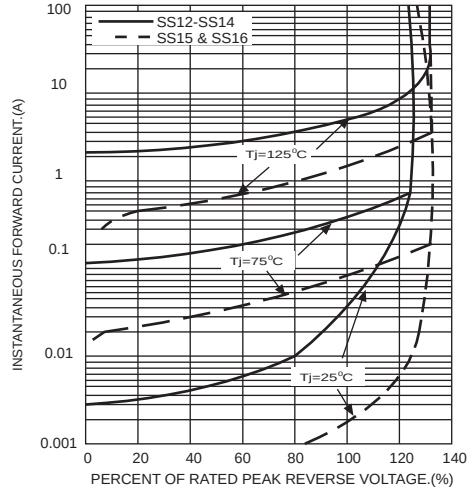


FIG.5-TYPICAL JUNCTION CAPACITANCE