



## Features

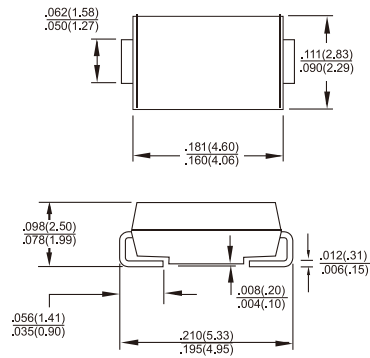
- ◇ UL Recognized File # E-326243
- ◇ For surface mounted application
- ◇ Metal silicon junction, majority carrier conduction
- ◇ Low forward voltage drop
- ◇ Easy pick and place
- ◇ High surge current capability
- ◇ Plastic material used carries Underwriters Laboratory Classification 94V-0
- ◇ Epitaxial construction
- ◇ High temperature soldering:  
260°C / 10 seconds at terminals
- ◇ Green compound with suffix "G" on packing code & prefix "G" on datecode.

## Mechanical Data

- ◇ Cases: Molded plastic
- ◇ Terminals: Matte tin plating
- ◇ Polarity: Indicated by cathode band
- ◇ Packaging: 12mm tape per EIA STD RS-481
- ◇ Weight: 0.064 grams

## SSL12 - SSL14

1.0 AMP. Surface Mount  
Low  $V_F$  Schottky Barrier Rectifiers  
**SMA/DO-214AC**



Dimensions in inches and (millimeters)

Marking Diagram



SL1X = Specific Device Code  
G = Green Compound  
Y = Year  
M = Work Month

## Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60 Hz, resistive or inductive load.

For capacitive load, derate current by 20%

Type Number	Symbol	SSL12	SSL13	SSL14	Units
Maximum Recurrent Peak Reverse Voltage	VRRM	20	30	40	V
Maximum RMS Voltage	VRMS	14	21	28	V
Maximum DC Blocking Voltage	VDC	20	30	40	V
Maximum Average Forward Rectified Current See Fig. 1	IF(AV)	1.0			A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method )	IFSM	50			A
Maximum Instantaneous Forward Voltage (Note 1) @ 1.0A	VF	0.39			V
Maximum DC Reverse Current @ TA =25°C at Rated DC Blocking Voltage @ TA=100 °C (Note 1)	IR	0.2			mA
		50			mA
Maximum Thermal Resistance (Note 2)	RθJL RθJA	28			°C /W
		88			
Marking Code		SL12	SL13	SL14	
Operating Temperature Range	TJ	-55 to +125			°C
Storage Temperature Range	TSTG	-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.

## RATINGS AND CHARACTERISTIC CURVES (SSL12 THRU SSL14)

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

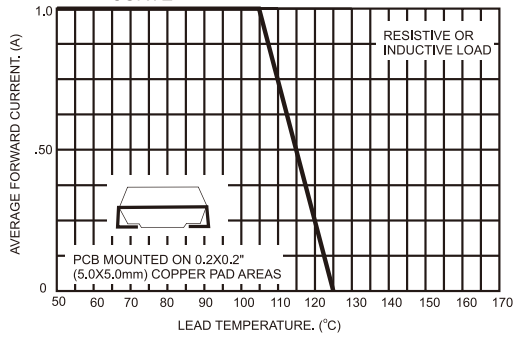


FIG.2- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

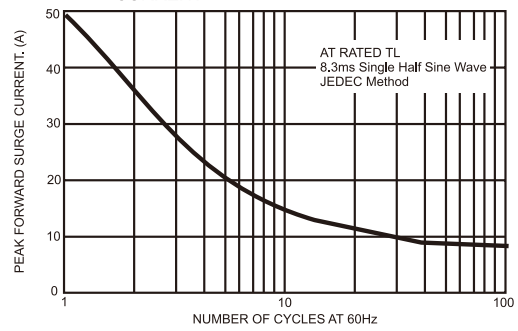


FIG.3- TYPICAL FORWARD CHARACTERISTICS

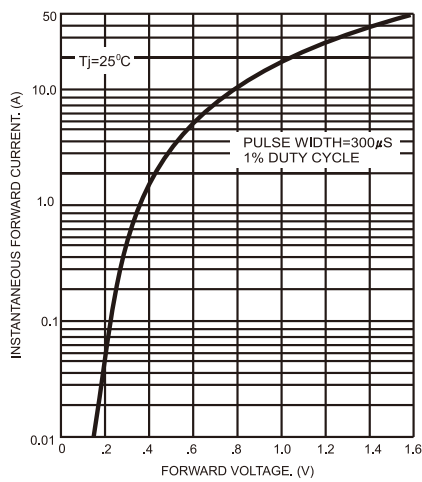


FIG.4- TYPICAL REVERSE CHARACTERISTICS

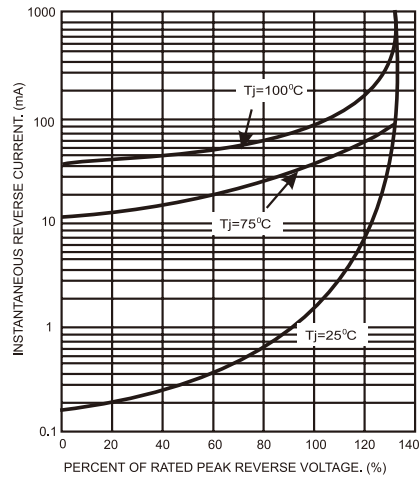
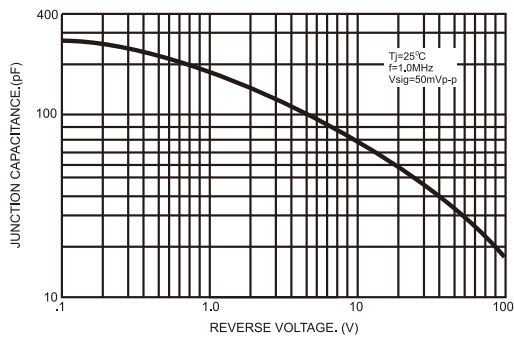


FIG.5- TYPICAL JUNCTION CAPACITANCE



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