

1.0AMP Surface Mount Schottky Barrier Rectifier SMA/DO-214AC

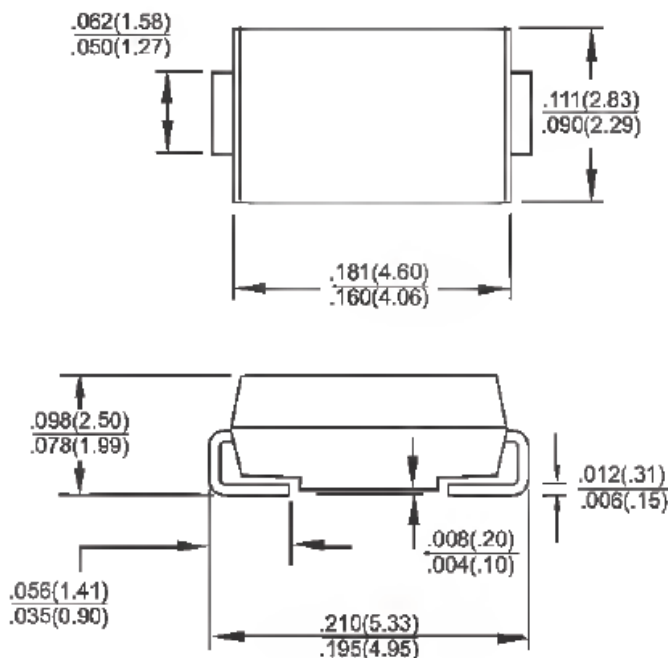


RoHS
COMPLIANCE



Features

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

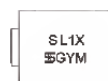


Mechanical Data

- ✧ Case: Molded plastic
- ✧ Terminal: Matte tin plating
- ✧ Polarity: Indicated by cathode band
- ✧ Packaging: 12mm tape per EIA STD RS-481
- ✧ Weight: 0.064 gram

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	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	20	30	40	V
Maximum RMS Voltage	V_{RMS}	14	21	28	V
Maximum DC Blocking Voltage	V_{DC}	20	30	40	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	1			A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load	I_{FSM}	50			A
Maximum Instantaneous Forward Voltage (Note 1) @ 1 A	V_F	0.39			V
Maximum Reverse Current @ Rated VR $T_A=25\text{ }^\circ\text{C}$ $T_A=100\text{ }^\circ\text{C}$	I_R	0.2			mA
		50			mA
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	88			$^\circ\text{C/W}$
	$R_{\theta JL}$	28			
Marking Code		SL12	SL13	SL14	
Operating Temperature Range	T_J	- 55 to + 125			$^\circ\text{C}$
Storage Temperature Range	T_{STG}	- 55 to + 150			$^\circ\text{C}$

Note1: Pulse Test with PW=300u sec, 1% Duty Cycle

Note2: Mount on Cu-Pad Size 5mm × 5mm on P.C.B.

RATINGS AND CHARACTERISTIC CURVES (SSL12 THRU SSL14)

FIG.1 FORWARD CURRENT DERATING CURVE

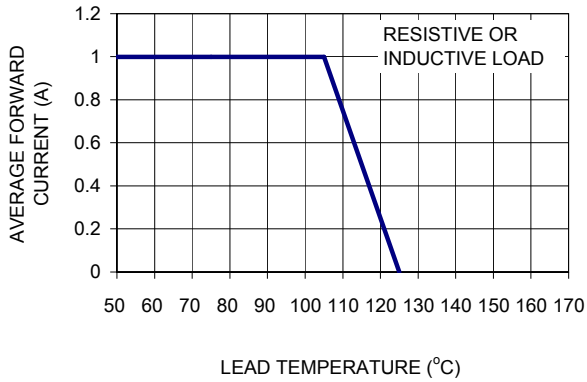


FIG. 2 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

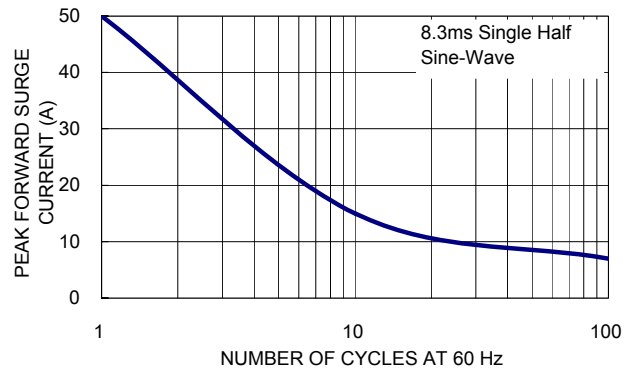


FIG. 3 TYPICAL FORWARD CHARACTERISTICS

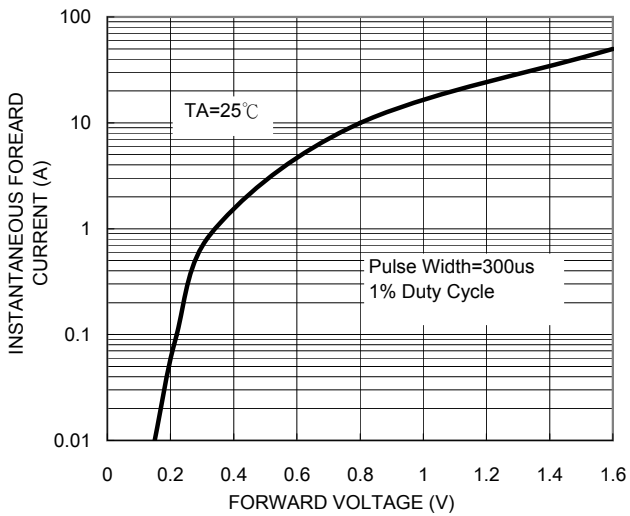


FIG. 4 TYPICAL RERVERSE CHARACTERISTICS

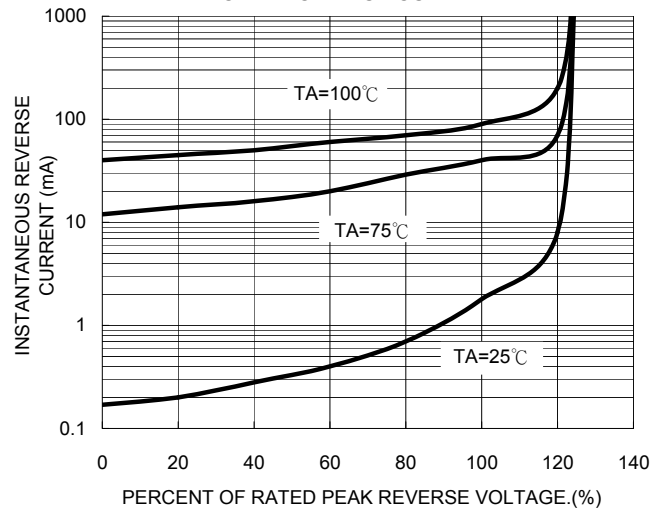


FIG. 5 TYPICAL JUNCTION CAPACITANCE

