

SS12L - SS115L

1.0 AMP. Surface Mount Schottky Barrier Rectifiers

Sub SMA

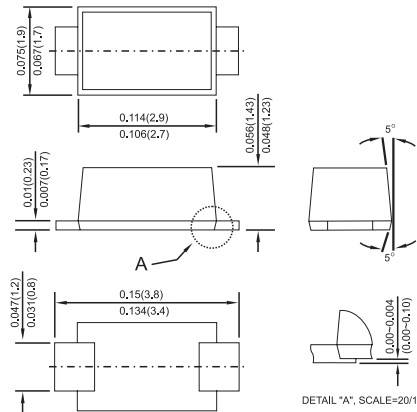


Features

- ✧ For surface mounted application
- ✧ Low-Profile Package
- ✧ Ideal for automated pick & place
- ✧ Low power loss, high efficiency
- ✧ High current capability, low VF
- ✧ High surge current capability
- ✧ Plastic material used carries Underwriters Laboratory Classification 94V-0
- ✧ Epitaxial construction
- ✧ High temperature soldering: 260°C / 10 seconds at terminals

Mechanical Data

- ✧ Cases: Sub SMA plastic case
- ✧ Terminal : Pure tin plated, lead free.
- ✧ Polarity: Color band denotes cathode end
- ✧ Packaging: 12mm tape per EIA STD RS-481
- ✧ Weight approx. 15mg



Dimensions in inches and (millimeters)

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, de-rate current by 20%

Type Number	Symbol	SS 12L	SS 13L	SS 14L	SS 15L	SS 16L	SS 19L	SS 110L	SS 115L	Units
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	20	30	40	50	60	90	100	150	V
Maximum RMS Voltage	V _{RMS}	14	21	28	35	42	63	70	105	V
Maximum DC Blocking Voltage	V _{DC}	20	30	40	50	60	90	100	150	V
Marking Code (Note 2)		12LYM	13LYM	14LYM	15LYM	16LYM	19LYM	10LYM	A5LYM	
Maximum Average Forward Rectified Current	I _(AV)	1.0								A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I _{FSM}	30								A
Maximum Instantaneous Forward Voltage (Note 1) @ 0.5A @ 1.0A	V _F	0.385 0.45	0.43 0.50	0.51 0.55	0.58 0.70		0.70 0.80		0.75 0.90	V
Maximum DC Reverse Current @ T _A =25 °C at Rated DC Blocking Voltage @ T _A =100 °C	I _R	0.4					0.05			mA
		8.0	6.0				0.5			mA
Maximum Thermal Resistance (Note 3)	R _{θJA}	100								°C/W
	R _{θJL}	45								
Operating Temperature Range	T _J	-55 to +150								°C
Storage Temperature Range	T _{STG}	-55 to + 150								°C

- Notes:
1. Pulse Test with PW=300 usec, 1% Duty Cycle.
 2. 12LYM: 1-1A, 2-20V, L-Low Profile, Y-Year Code, M-Month Code.
 3. Measured on P.C.Board with 0.2" x 0.2" (5.0mm x 5.0mm) Copper Pad Areas.

RATINGS AND CHARACTERISTIC CURVES (SS12L THRU SS115L)

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

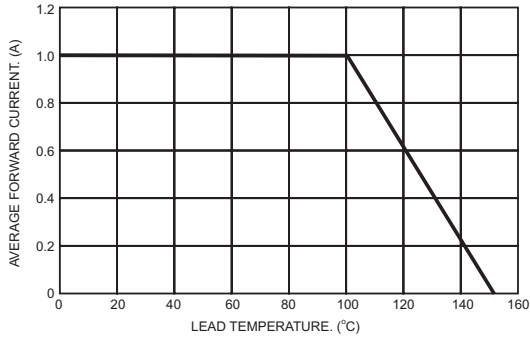


FIG.2- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

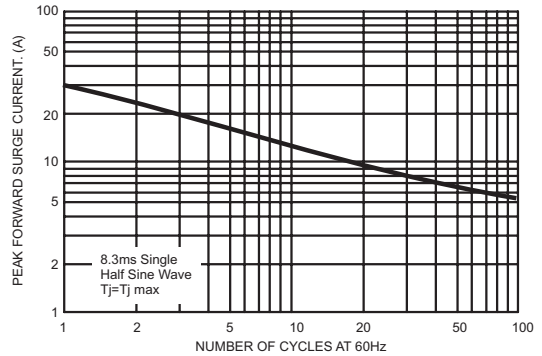


FIG.3- TYPICAL FORWARD CHARACTERISTICS

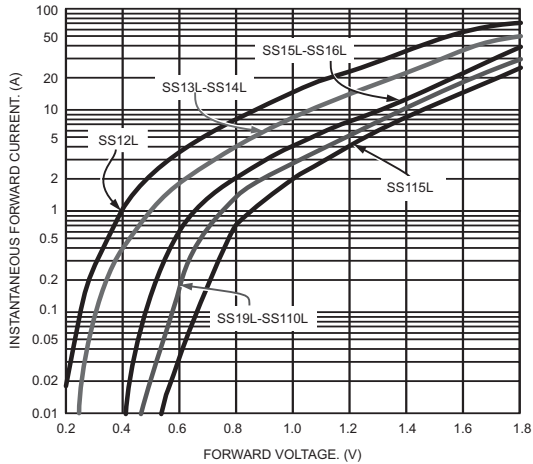


FIG.4- TYPICAL REVERSE CHARACTERISTICS

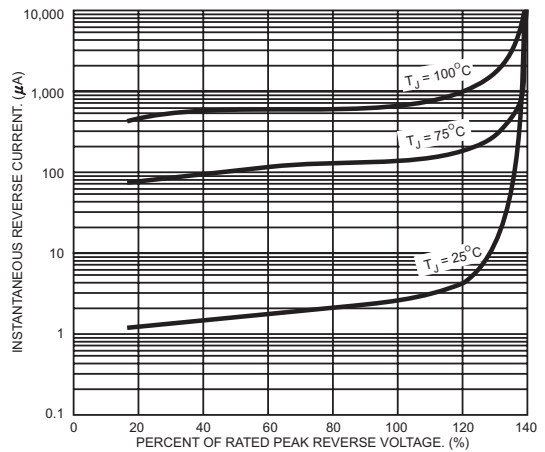


FIG.5- TYPICAL JUNCTION CAPACITANCE

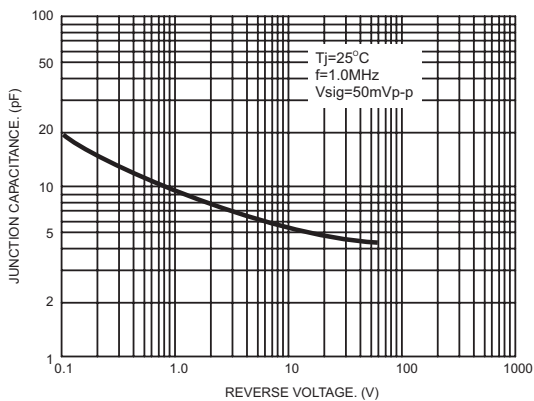


FIG.6- TYPICAL TRANSIENT THERMAL CHARACTERISTICS

