

Features

- ✧ For surface mounted application
- ✧ Metal silicon junction, majority carrier conduction
- ✧ Low forward voltage drop
- ✧ Easy pick & place
- ✧ High surge current capability
- ✧ Plastic material used carriers Underwriters Laboratory Classsification 94V-0
- ✧ Epitaxial construction
- ✧ High temperature soldering guaranteed:
260°C/10s at terminals
- ✧ Meet MSL level 1, per J-STD-020D,
lead free maximum peak of 260°C
- ✧ 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: 0.093 grams

Ordering Information (example)

Part No.	Package	Packing	Packing code	Green Compound Packing code
SSL22	SMB	850 / 7" REEL	R5	R5G

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	SSL22	SSL23	SSL24	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)}	2			A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I _{FSM}	80			A
Maximum Instantaneous Forward Voltage (Note 1) @ 2 A	V _F	0.41			V
Maximum DC Reverse Current at Rated DC Blocking Voltage	I _R	0.4			mA
		50		60	
Typical Thermal Resistance	R _{θjL}	25			°C/W
	R _{θjA}	70			
Marking Code		SL22	SL23	SL24	
Operating Temperature Range	T _J	- 55 to + 125			°C
Storage Temperature Range	T _{STG}	- 55 to + 150			°C

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

RATINGS AND CHARACTERISTIC CURVES (SSL22 THRU SSL24)

FIG.1 FORWARD CURRENT DERATING CURVE

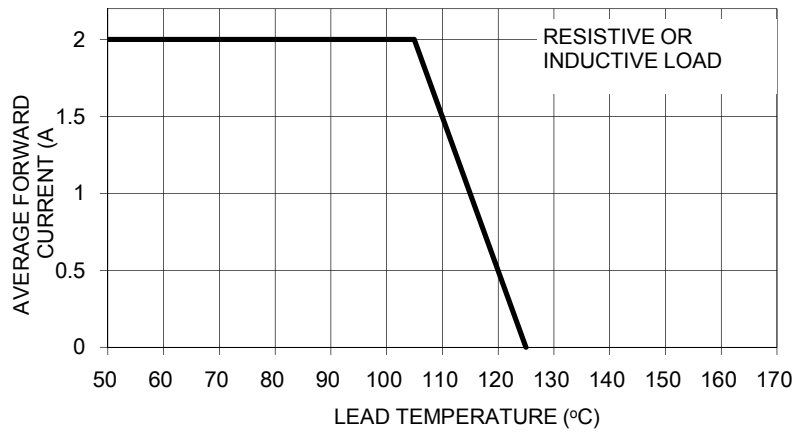


FIG. 2 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

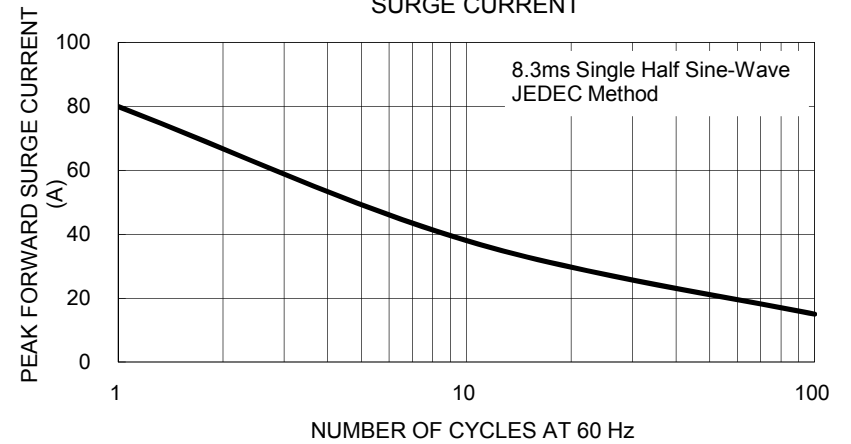


FIG. 3 TYPICAL FORWARD CHARACTERISTICS

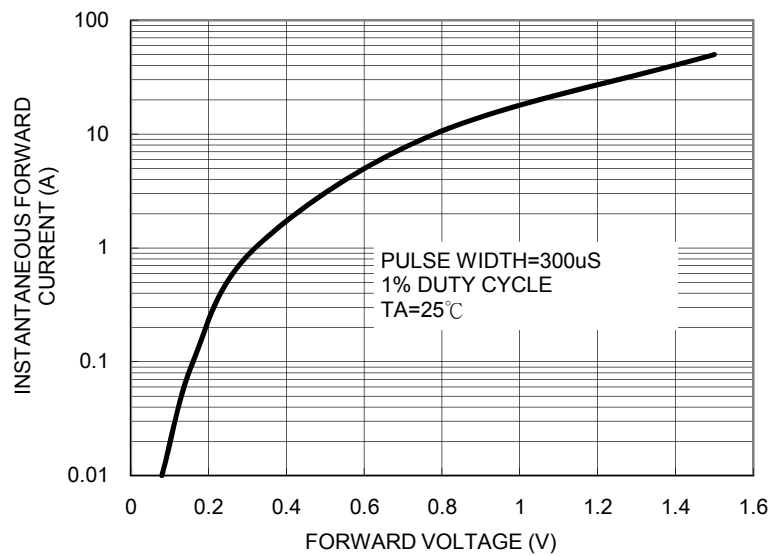


FIG. 4 TYPICAL REVERSE CHARACTERISTICS

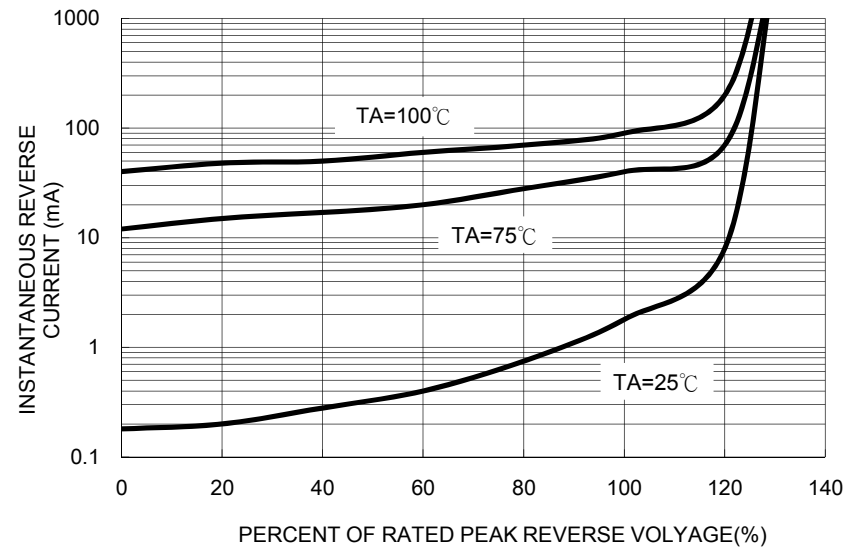
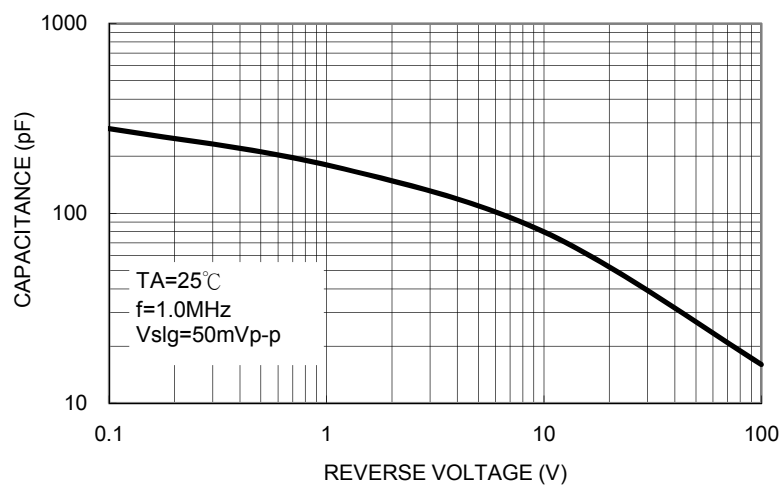


FIG. 5 TYPICAL JUNCTION CAPACITANCE

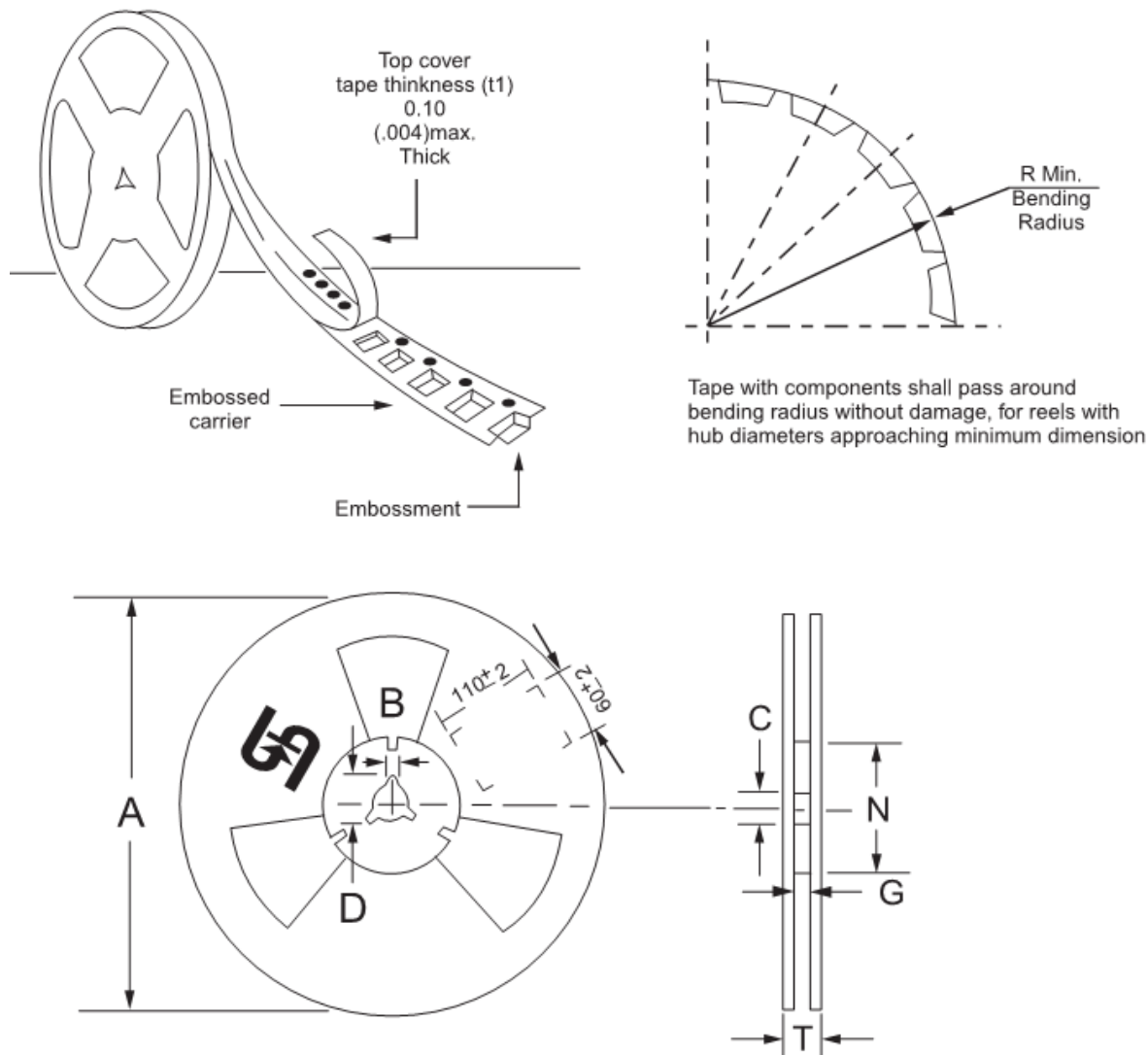


Ordering information

Part No.	Package	Packing	Packing code	Green Compound Packing code
SSL2x (Note)	SMB	850 / 7" REEL	R5	R5G
	SMB	3K / 13" REEL	R4	R4G

Note: "x" is Device Code from "2" thru "4".

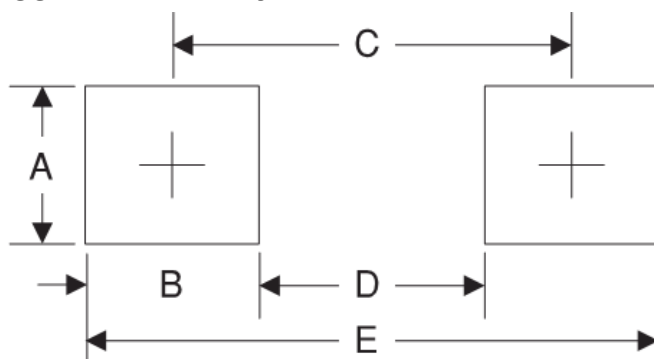
Tape & Reel specification



Reel Size	Tape Size	A	B	C	D	N	G	T
		±2.0	±0.4	+0.5;-0.2	min	±1.0	+0.8;-0	max
7"	12mm	178	1.9	13	21	62	12.2	14.6
Reel Size	Tape Size	A	B	C	D	N	G	T
		max	±0.5	±0.5	min	±0.5	+2.0;-0	max
13"	12mm	330	2	13	20.2	75	12.4	18.4

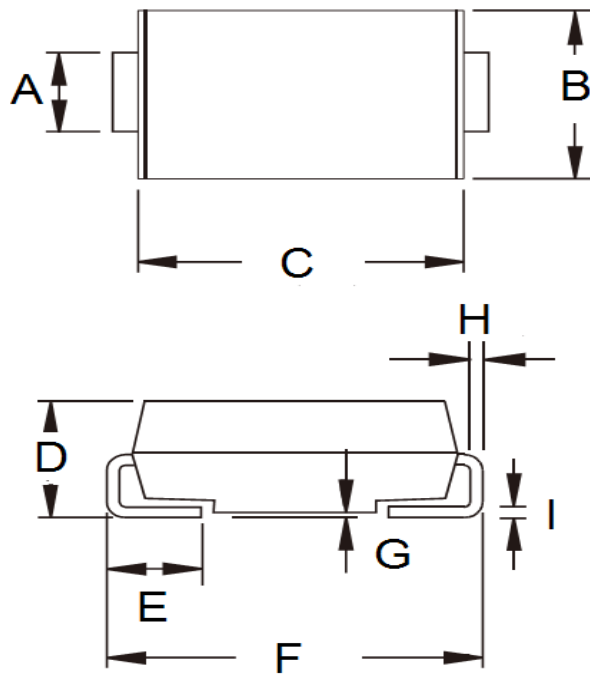
Unit (mm)

Suggested PAD Layout



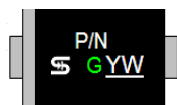
Symbol	Unit(mm)
A	2.3
B	2.5
C	4.3
D	1.8
E	6.7

Dimensions



DIM.	Unit(mm)		Unit(inch)	
	Min	Max	Min	Max
A	1.95	2.10	0.077	0.083
B	3.48	3.73	0.137	0.147
C	4.25	4.75	0.167	0.187
D	1.99	2.61	0.078	0.103
E	0.90	1.41	0.035	0.056
F	5.10	5.30	0.201	0.209
G	0.10	0.20	0.004	0.008
H	0.15	0.31	0.006	0.012
I	0.15	0.31	0.006	0.012

Marking Diagram



P/N = Specific Device Code
 G = Green Compound
 YW = Date Code

Mouser Electronics

Authorized Distributor

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Taiwan Semiconductor:

[SSL22](#) [SSL23](#) [SSL24](#)