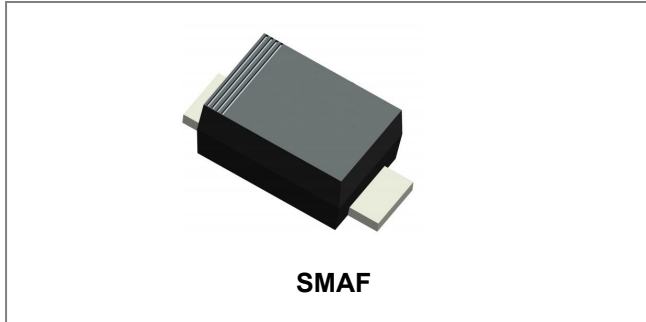


## SS3L45 SCHOTTKY RECTIFIER



### Features

- For surface mounted application
- Metal to silicon rectifier, majority carrier conduction
- Low forward voltage drop
- Easy pick and place
- High surge current capability
- This is a Pb – Free Device
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request

### Circuit Diagram



### Mechanical Data

- Case: Molded plastic
- High temperature soldering: 260°C/10 seconds at terminals
- Polarity: Indicated by cathode band
- Weight: 0.064 grams

### Maximum Ratings and Electrical Characteristics @T<sub>A</sub>=25°C unless otherwise specified

Parameter	Symbol	SS3L45	Units
Marking Code		3L45	
Maximum Repetitive Peak Reverse Voltage Maximum DC Blocking Voltage	V <sub>RRM</sub> V <sub>DC</sub>	45	V
Maximum RMS Voltage	V <sub>RMS</sub>	31	V
Maximum Average Forward Rectified Current	I <sub>F(AV)</sub>	3.0	A
Peak Forward Surge Current 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC Method)	I <sub>FSM</sub>	80	A
Maximum Instantaneous Forward Voltage* @ I <sub>F</sub> = 3.0A	V <sub>F</sub>	0.45	V
Maximum DC Reverse Current* @T <sub>A</sub> = 25°C At Rated DC Blocking Voltage* @T <sub>A</sub> = 100°C	I <sub>R</sub>	0.2 100	mA
Typical Thermal Resistance	R <sub>θJL</sub> R <sub>θJA</sub>	17 55	°C/W
Operating Temperature Range	T <sub>J</sub>	-55 to +125	°C
Storage Temperature Range	T <sub>STG</sub>	-55 to +150	°C

\* Pulse width < 300 μs, duty cycle < 2%

**Ratings and Characteristics Curves**

FIG.1 FORWARD CURRENT DERATING CURVE

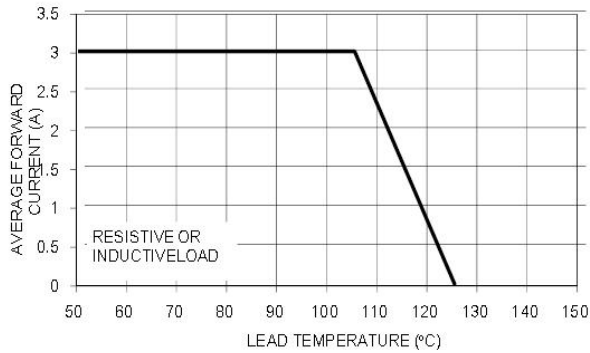


FIG. 2 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

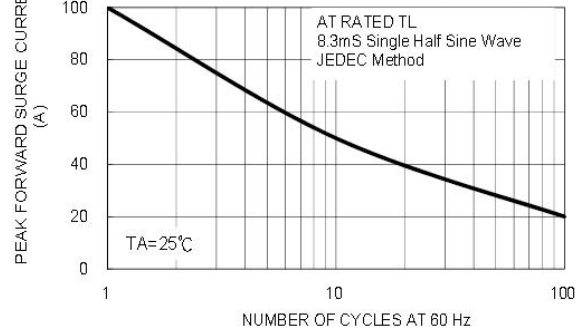


FIG. 3 TYPICAL FORWARD CHARACTERISTICS

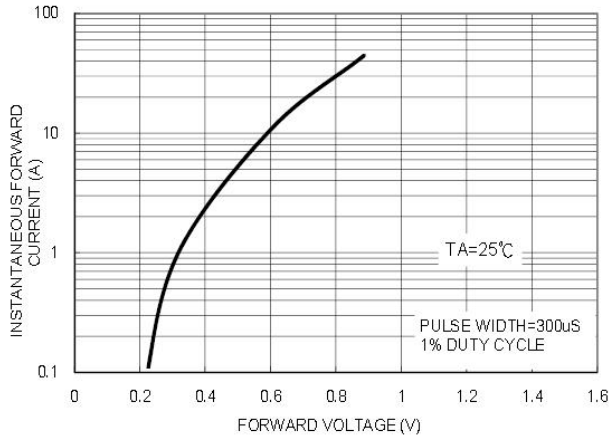


FIG. 4 TYPICAL REVERSE CHARACTERISTICS

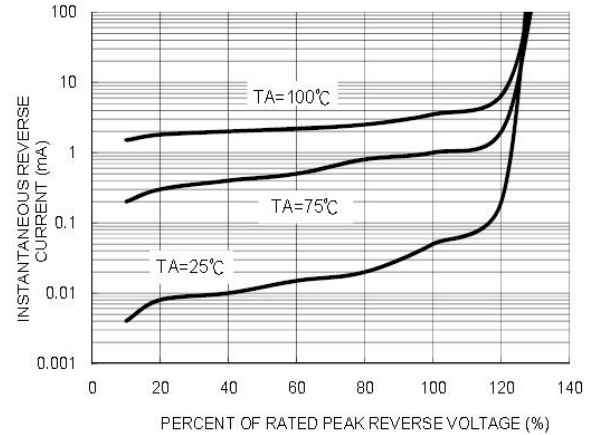
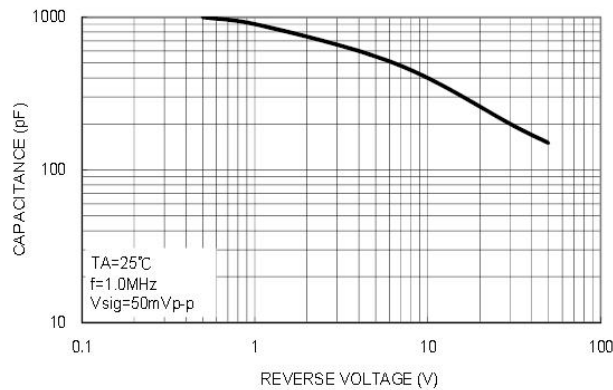
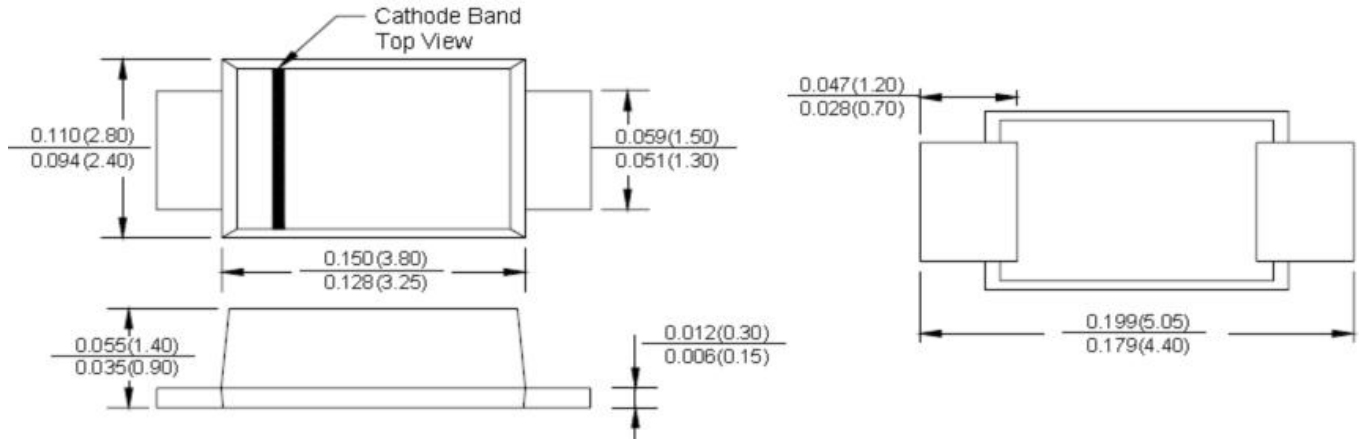


FIG. 5 TYPICAL JUNCTION CAPACITANCE



**Mechanical Dimensions SMAF (Millimeters/Inches)**

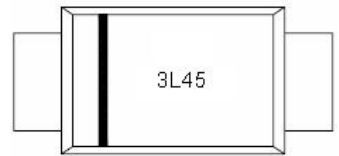


**Ordering Information**

Device	Package	Shipping
SS3L45	SMAF (Pb-Free)	3000pcs / reel

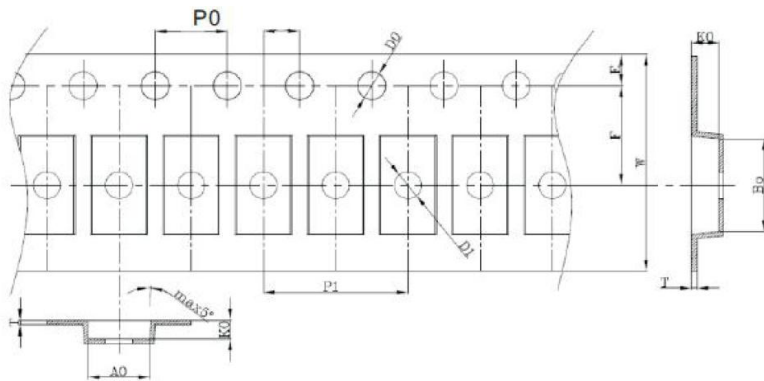
For information on tape and reel specifications, including part orientation and tape sizes, please refer to our tape and reel packaging specification.

**Marking Diagram**



3L45 = Marking Code

**Carrier Tape Specification SMAF**



SYMBOL	Millimeters	
	Min.	Max.
A0	2.83	3.03
B0	2.23	5.43
K0	1.23	1.43
P0	3.90	4.10
P1	3.90	4.10
P2	1.90	2.10
T	0.17	0.23
E	1.63	1.83
F	5.45	5.65
D0	1.50	1.60
D1	1.45	1.55
W	11.70	12.30

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