Technical Data *Green products*
Data Sheet N1823 Rev. -

SS3L45 LOW VF SCHOTTKY RECTIFIER

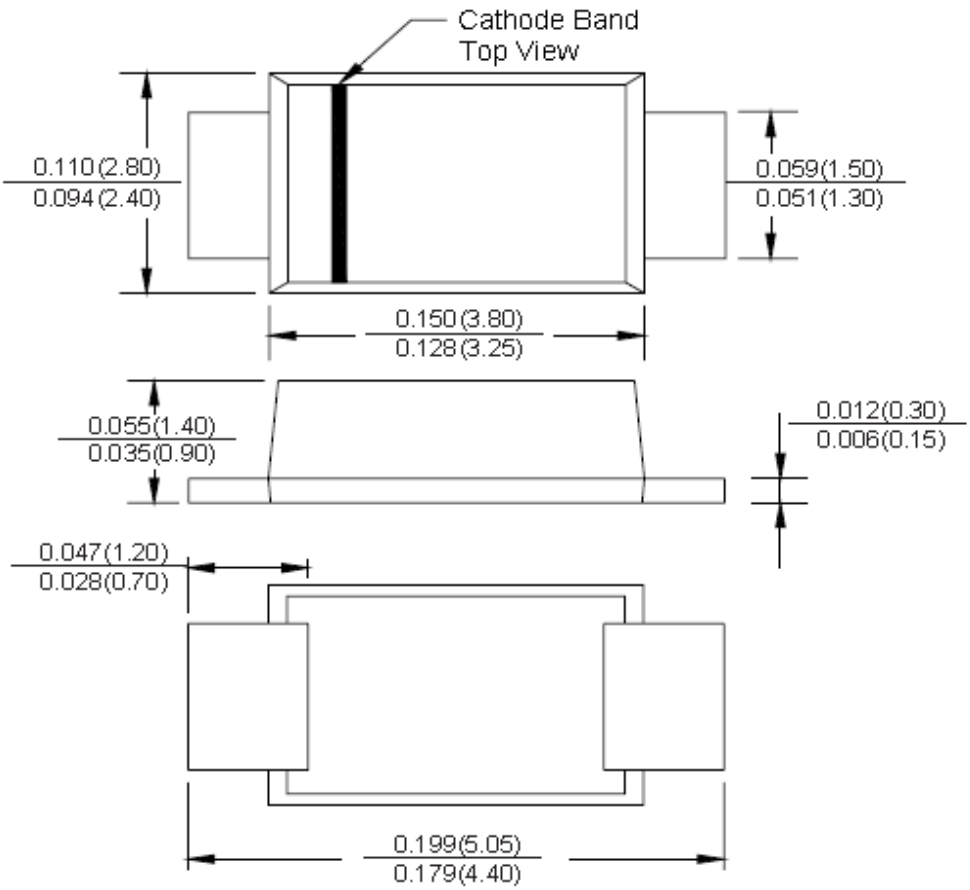
Features:

- **For surface mounted application**
- **Metal to sillicon rectifier, majority carrier conduction**
- **Low forward voltage drop**
- **Easy pick and place**
- **High surge current capability**

Mechanical Data

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

Mechanical Dimensions (In Inches/mm)

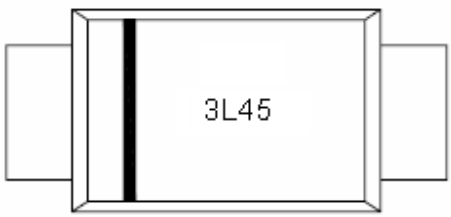


SMAF

Technical Data
Data Sheet N1823 Rev. -

Green products

Marking Diagram:



3L45 = Part Name

Cautions: Molding resin
Epoxy resin UL: 94V-0

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.

Technical Data
Data Sheet N1823 Rev. -

Green products

Maximum Ratings and Electrical Characteristics @T_A=25°C unless otherwise specified

Single Phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

Parameter	Symbol	SS3L45	Unit
Marking Code		3L45	
Maximum Repetitive Peak Reverse Voltage Maximum DC Blocking Voltage	V_{RRM} V_{DC}	45	V
Maximum RMS Voltage	V_{RMS}	31	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	3.0	A
Peak Forward Surge Current 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	80	A
Maximum Instantaneous Forward Voltage(Note1) @ I_F = 3.0A	V_F	0.45	V
Maximum DC Reverse Current @T_A = 25°C At Rated DC Blocking Voltage @T_A = 100°C	I_R	0.2 100	mA
Typical Thermal Resistance	$R_{\theta JL}$ $R_{\theta JA}$	17 55	°C/W
Operating Temperature Range	T_J	-55 to +125	°C
Storage Temperature Range	T_{STG}	-55 to +150	°C

Note: 1. Pluse Test with PW=300usec, 1% Duty Cycle

Technical Data
Data Sheet N1823 Rev. -

Green products

FIG.1 FORWARD CURRENT DERATING CURVE

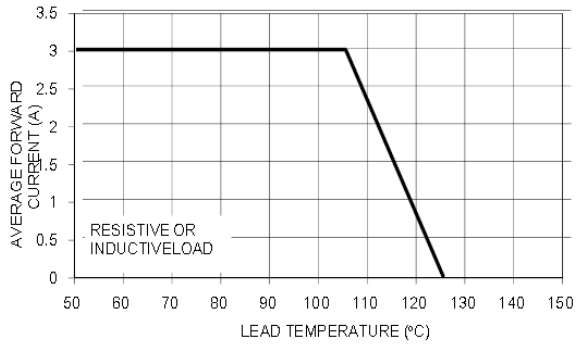


FIG. 2 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

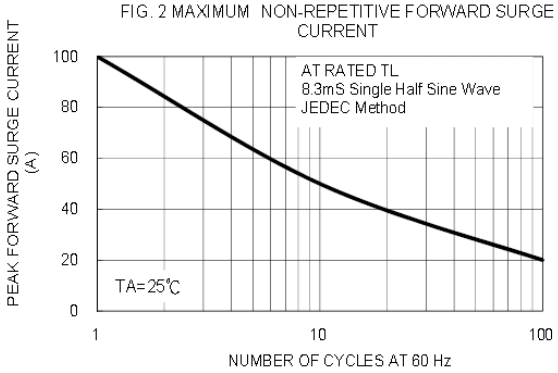


FIG. 3 TYPICAL FORWARD CHARACTERISTICS

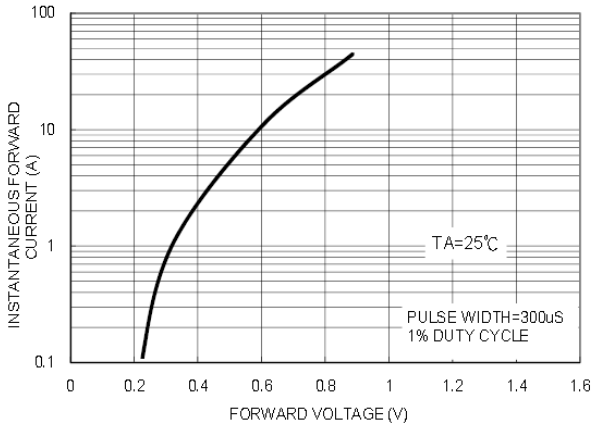


FIG. 4 TYPICAL REVERSE CHARACTERISTICS

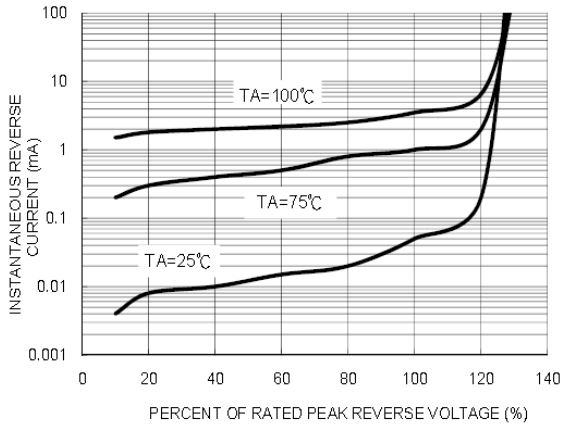
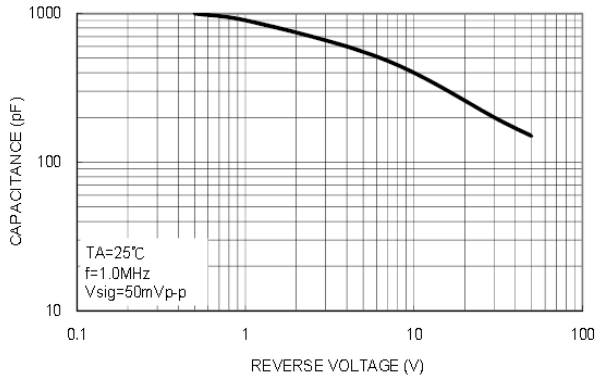


FIG. 5 TYPICAL JUNCTION CAPACITANCE



SS3L45

Technical Data ***Green products***

Data Sheet N1823 Rev. -

DISCLAIMER:

1- The information given herein, including the specifications and dimensions, is subject to change without prior notice to improve product characteristics. Before ordering, purchasers are advised to contact the SMC - Sangdest Microelectronics (Nanjing) Co., Ltd sales department for the latest version of the datasheet(s).

2- In cases where extremely high reliability is required (such as use in nuclear power control, aerospace and aviation, traffic equipment, medical equipment , and safety equipment) , safety should be ensured by using semiconductor devices that feature assured safety or by means of users' fail-safe precautions or other arrangement .

3- In no event shall SMC - Sangdest Microelectronics (Nanjing) Co., Ltd be liable for any damages that may result from an accident or any other cause during operation of the user's units according to the datasheet(s). SMC - Sangdest Microelectronics (Nanjing) Co., Ltd assumes no responsibility for any intellectual property claims or any other problems that may result from applications of information, products or circuits described in the datasheets.

4- In no event shall SMC - Sangdest Microelectronics (Nanjing) Co., Ltd be liable for any failure in a semiconductor device or any secondary damage resulting from use at a value exceeding the absolute maximum rating.

5- No license is granted by the datasheet(s) under any patents or other rights of any third party or SMC - Sangdest Microelectronics (Nanjing) Co., Ltd.

6- The datasheet(s) may not be reproduced or duplicated, in any form, in whole or part, without the expressed written permission of SMC - Sangdest Microelectronics (Nanjing) Co., Ltd.

7- The products (technologies) described in the datasheet(s) are not to be provided to any party whose purpose in their application will hinder maintenance of international peace and safety nor are they to be applied to that purpose by their direct purchasers or any third party. When exporting these products (technologies), the necessary procedures are to be taken in accordance with related laws and regulations..