



SHV30300G PLASTIC HIGH-VOLTAGE RECTIFIER

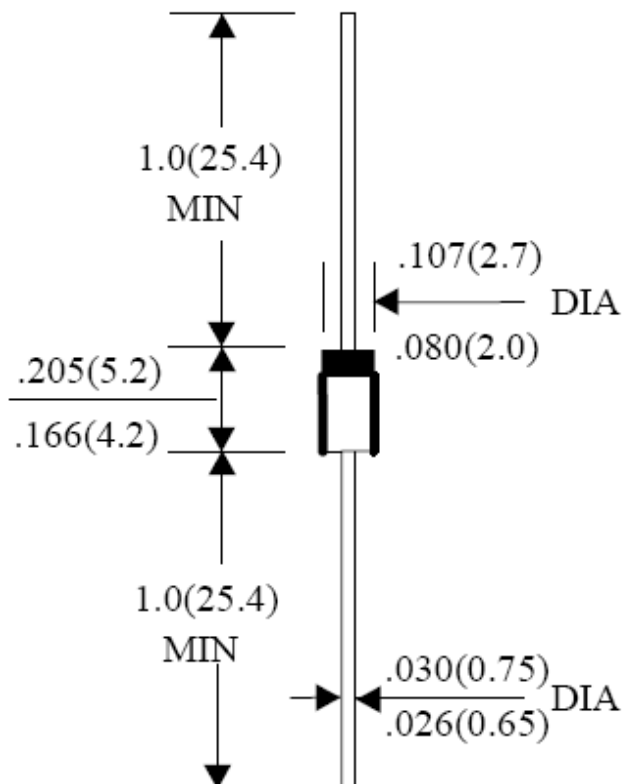
Features:

- Low Reverse Leakage
- High Forward Surge Capability
- High Temperature Soldering Guaranteed: 250°C/10 sec onds,
0.375" (9.5mm) Lead Length
- 5 lbs. (2.3kg) Tension
- This is a Pb – Free Device
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request

Mechanical Data:

- Terminals: Plated Axial Leads
- Polarity : Color Band Denotes Cathode end
- Mounting Position: Any

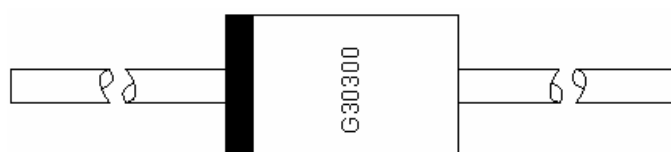
Mechanical Dimensions: In Inches/ mm



DO-41

Technical Data
Data Sheet N1310, Rev. B

Marking Diagram:



G = Package type
30 = Forward Current (30mA)
300 = Reverse Voltage (3000V)

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

Ordering Information:

Device	Package	Shipping
SHV30300G	DO-41 (Pb-Free)	5000 pcs / tape

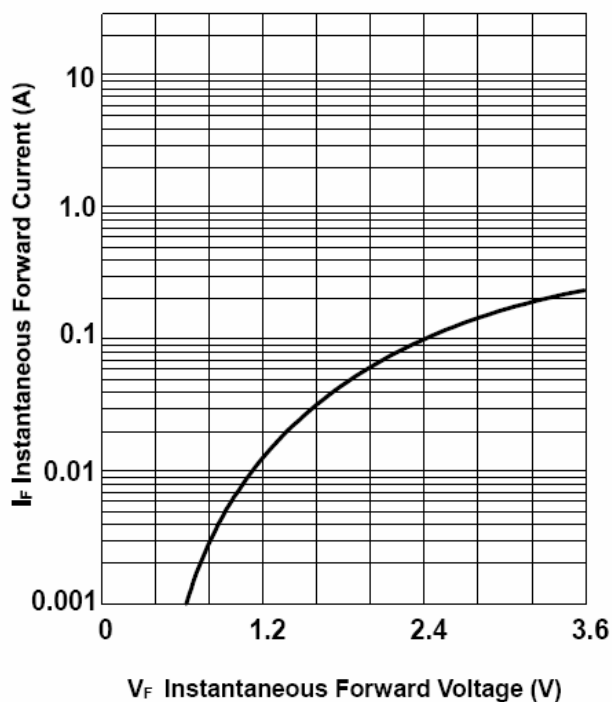
For information on tape and reel specifications, including part orientation and tape sizes, please refer to our Tape and Reel Packaging Specification.



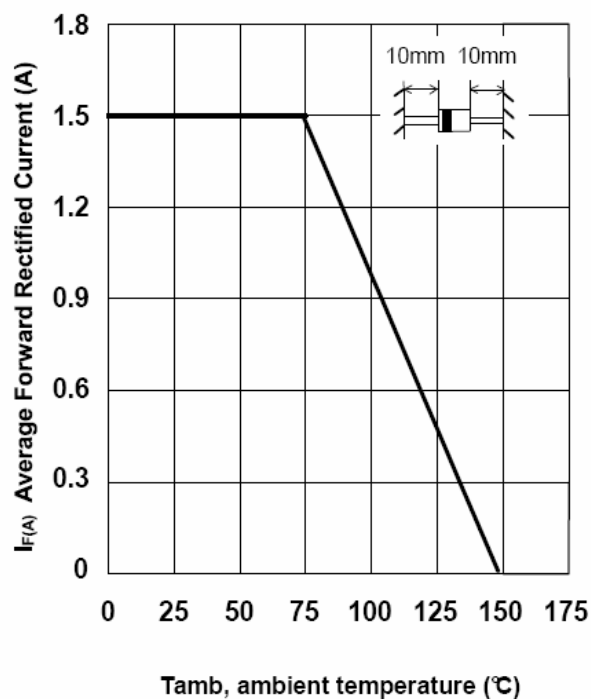
Maximum Ratings and Electrical Characteristics @ $T_A=25^\circ\text{C}$ ambient temperature unless otherwise specified.

Characteristic	Symbol	SHV30300G	Unit
Maximum Repetitive Peak Reverse Voltage Maximum DC Blocking Voltage	V_{RRM} V_{DC}	3000	V
Maximum RMS Voltage	V_{RMS}	2100	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	0.03	A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	3	A
Maximum Peak Reverse Current Full Cycle @ $T_A = 75^\circ\text{C}$	$I_{R(AV)}$	100	μA
Maximum Forward Voltage @ $I_F = 0.03\text{A}$	V_{FM}	1.8	V
Maximum Reverse Current @ $T_A = 25^\circ\text{C}$ @ $T_A = 100^\circ\text{C}$	I_{RM}	5 200	μA
Reverse Breakdown Voltage $I_{RM} = 100\mu\text{A}$	V_Z	3200-6000	V
Junction Temperature	T_J	-40 to +150	$^\circ\text{C}$
Operating Junction and Storage Temperature Range	T_J, T_{STG}	-40 to +150	$^\circ\text{C}$
Case Style	DO-41		

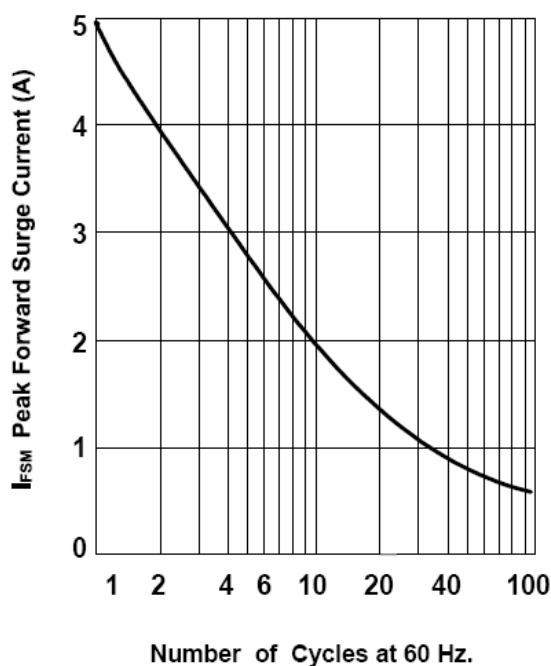
TYPICAL FORWARD CHARACTERISTIC



FORWARD CURRENT DERATING CURVE



MAXIMUM NON REPETITIVE
PEAK FORWARD SURGE CURRENT





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..