Technical Data *Green Products*
Data Sheet N0558, Rev. B

RL201G THRU RL207G

GLASS PASSIVATED SILICON RECTIFIER

Reverse Voltage - 50 to 1000 Volts Forward Current - 2.0 Amperes

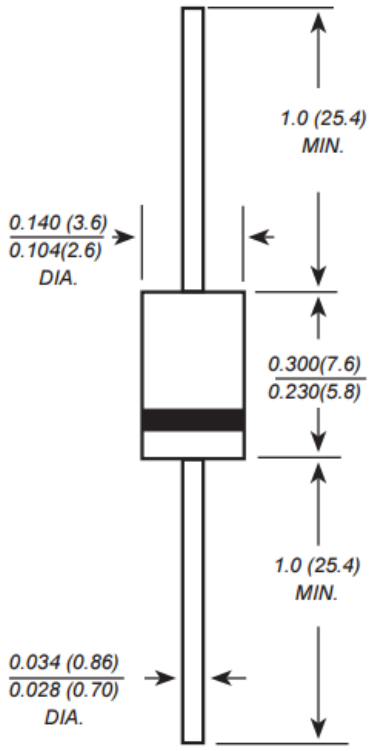
Features:

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- Construction utilizes void-free molded plastic technique
- Low reverse leakage
- High forward surge current capability
- High temperature soldering guaranteed: 260°C/10 seconds, 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:

- Case: DO-15 molded plastic body
- Terminals: Plated axial leads, solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end
- Mounting Position: Any Weight: 0.014 ounce, 0.40 grams

Mechanical Dimensions:



DO-15

RL201G-RL207G

Technical Data *Green Products*
Data Sheet N0558, Rev. B

Marking Diagram:

Where XXXXX is YYWWL

RL201G = Part Name
SSG = SSG
YY = Year
WW = Week
L = Lot Number

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

Ordering Information

Device	Package	Shipping
RL201G-RL207G	DO-15 (Pb-Free)	3000pcs / 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°C unless otherwise specified

Characteristic	Symbol	RL 201G	RL 202G	RL 203G	RL 204G	RL 205G	RL 206G	RL 207G	Unit
Maximum repetitive peak reverse voltage Maximum DC blocking voltage	V_{RRM} V_{DC}	**50**	**100**	**200**	**400**	**600**	**800**	**1000**	V
Maximum RMS voltage	V_{RMS}	**35**	**70**	**140**	**280**	**420**	**560**	**700**	V
Maximum average forward rectified current 0.375"(9.5mm) lead length @T_A = 75°C	$I_{(AV)}$	2.0							A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	70.0							A
Maximum instantaneous forward voltage at 2.0A	V_F	1.1							V
Maximum DC reverse current @T_A = 25°C at rated DC blocking voltage @T_A = 100°C	I_R	5.0 50.0							μA
Typical Junction Capacitance (Note 1)	C_J	20.0							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	50.0							°C/W
Operating and Storage Temperature Range	T_J, T_{STG}	-65 to +175							°C

Note: 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
2. Thermal resistance from junction to ambient at 0.375" (9.5mm) lead length, P.C.B. mounted.

Technical Data *Green Products*

Data Sheet N0558, Rev. B

RATINGS AND CHARACTERISTIC CURVES RL201G THRU RL207G

FIG. 1- FORWARD CURRENT DERATING CURVE

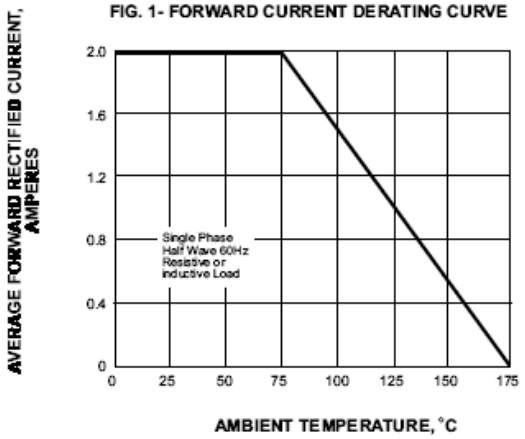


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

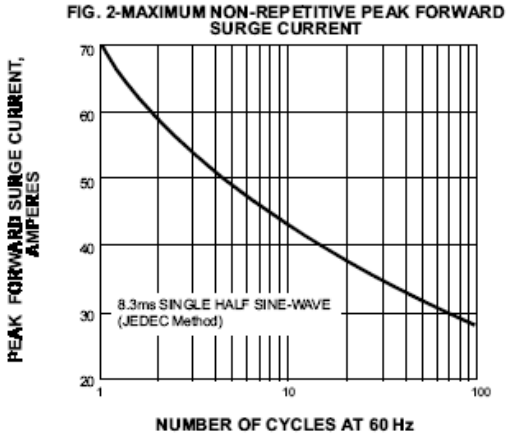


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

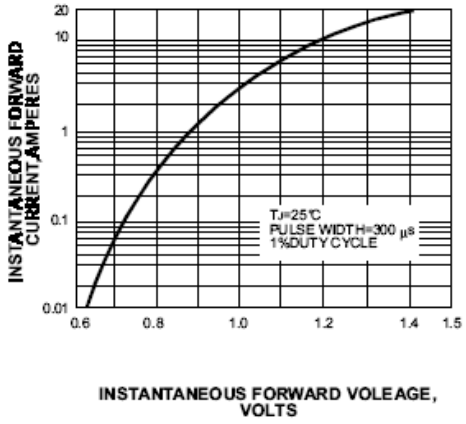


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

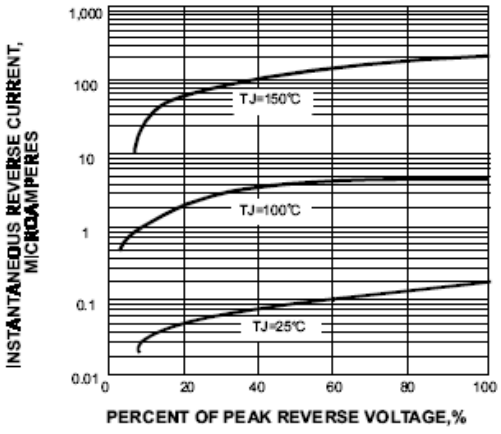


FIG. 5-TYPICAL JUNCTION CAPACITANCE

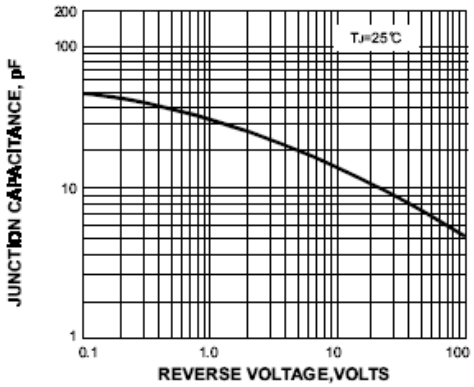
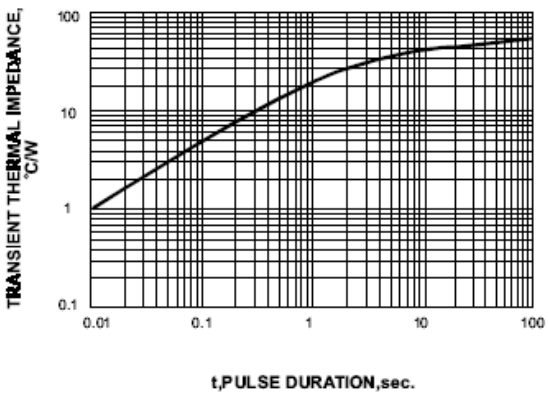


FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE



Technical Data ***Green Products***
Data Sheet N0558, Rev. B

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..