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RL101 THRU RL107

GENERAL PURPOSE SILICON RECTIFIER

Reverse Voltage - 50 to 1000 Volts Forward Current - 1.0 Amperes

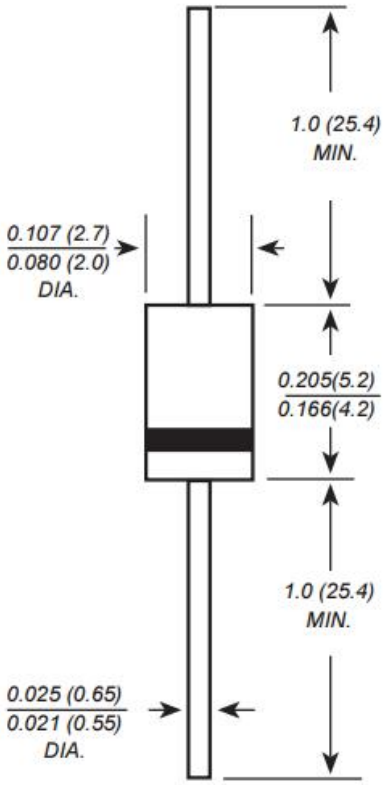
Features:

- 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: 250°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: A-405 molded plastic body
- Terminals: Plated axial leads, solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end
- Mounting Position: Any
- Weight: 0.008 ounce, 0.23 grams

Mechanical Dimensions: In Inches/mm



A-405

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MARKING DIAGRAM:

Where XXXXX is YYWWL

RL101	= Part Name
SSG	= SSG
YY	= Year
WW	= Week
L	= Lot Number

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

ORDERING INFORMATION

Device	Package	Shipping
RL101-RL107	A-405 (Pb-Free)	5000pcs / 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	RL101	RL102	RL103	RL104	RL105	RL106	RL107	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	$I_{(AV)}$	1.0							A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	30.0							A
Maximum instantaneous forward voltage at 1.0A	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	15.0							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.

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RATINGS AND CHARACTERISTIC CURVES RL101 THRU RL107

FIG. 1- FORWARD CURRENT DERATING CURVE

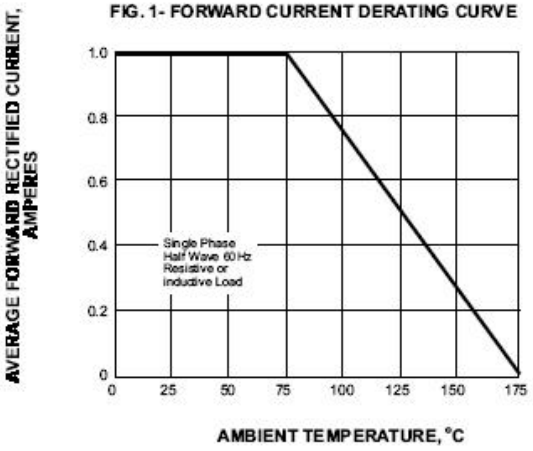


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

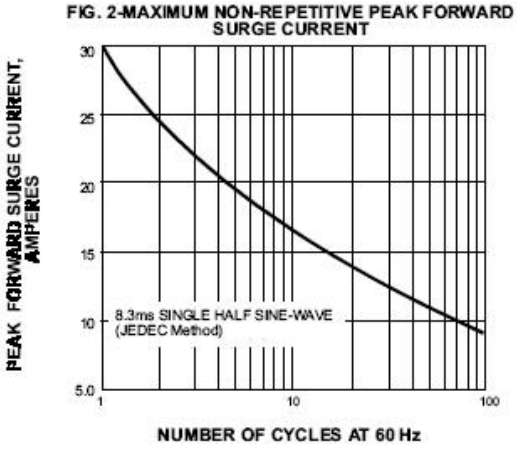


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

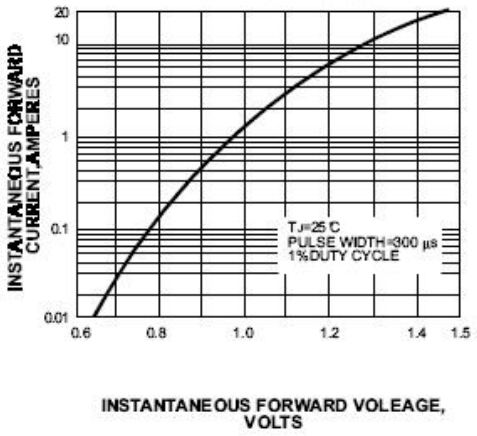


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

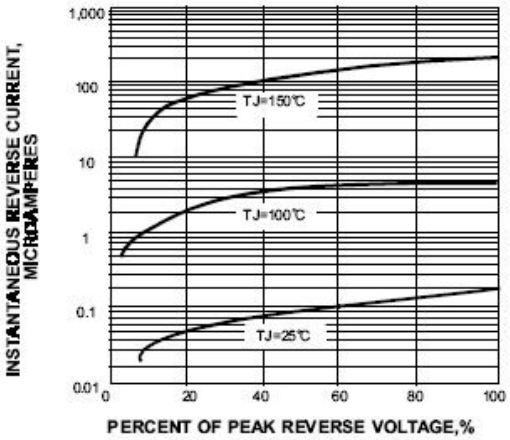


FIG. 5-TYPICAL JUNCTION CAPACITANCE

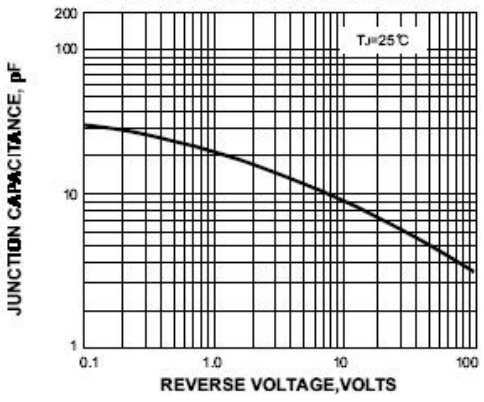
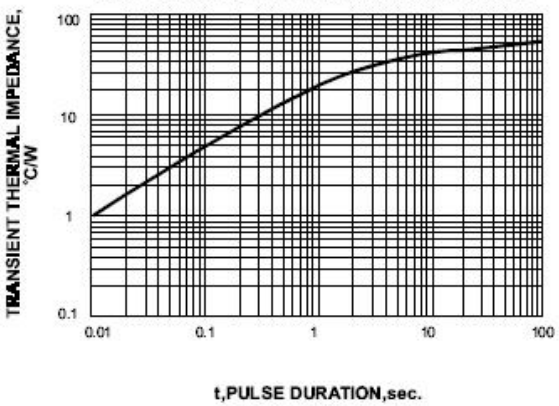


FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE



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