

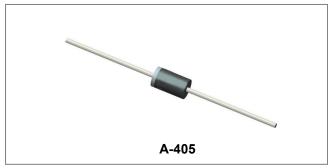




RL101G THRU RL107G

GLASS PASSIVATED 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

Circuit Diagram



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

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%.

Characteristic	Symbol	RL 101G	RL 102G	RL 103G	RL 104G	RL 105G	RL 106G	RL 107G	Units
Maximum repetitive peak reverse voltage Maximum DC blocking voltage	$V_{RRM} \ V_{DC}$	50	100	200	400	600	800	1000	٧
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				А			
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	30.0				А			
Maximum instantaneous forward voltage at 1.0A	V _F	1.1				V			
Maximum DC reverse current $@T_A = 25^{\circ}C$ at rated DC blocking voltage $@T_A = 100^{\circ}C$	I _R	5.0 50.0				μА			
Typical Junction Capacitance (Note 1)	Сл	15.0				pF			
Typical Thermal Resistance (Note 2)	R _{θJA}	50.0				°C/W			
Operating and Storage Temperature Range	T _J , T _{STG}	-65 to +175				°C			

Note: 1. Measured at 1.0 MHz 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

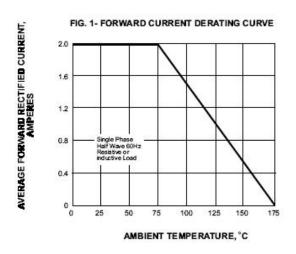
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 - http://www.smc-diodes.com
 sales@ smc-diodes.com

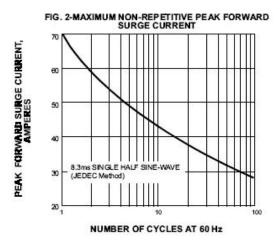


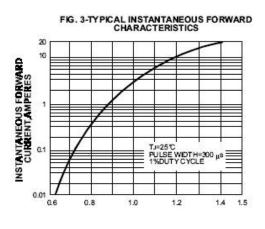




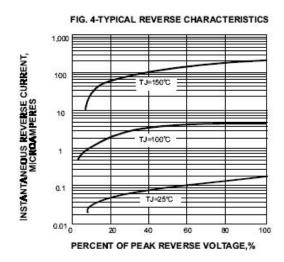
Ratings and Characteristics Curves

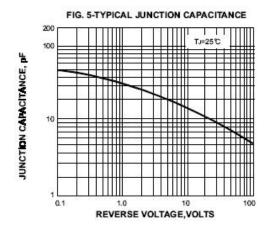


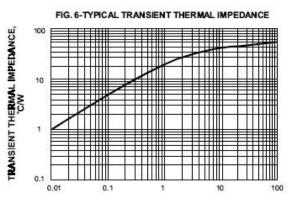




INSTANTANEOUS FORWARD VOLEAGE,







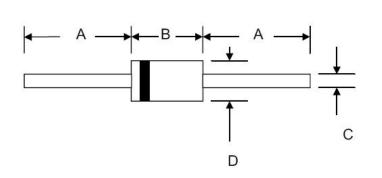
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Mechanical Dimensions A-405



SYMBOL	Millin	neters	Inches			
OT WIDOL	Min.	Max.	Min.	Max.		
А	25.4	-	1.000	-		
В	4.20	5.20	0.166	0.205		
С	0.55	0.65	0.021	0.025		
D	2.00	2.70	0.080	0.107		

Ordering Information

Device Package		Shipping		
RL101G-RL107G	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.

Marking Diagram



Where XXXXX is YYWWL

 RL101G
 = Part Name

 SSG
 = SSG

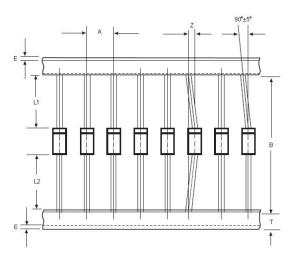
 YY
 = Year

 WW
 = Week

 L
 = Lot Number

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

Carrier Tape Specification A-405



SYMBOL	Millimeters			
	Min.	Max.		
А	4.50	5.50		
В	25.3	25.5		
Z	1.20	1.30		
Т	5.5	6.5		
E	-	0.80		
IL1-L2I	-	1.0		

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