

RL101G THRU RL107G

TECHNICAL SPECIFICATIONS OF GLASS PASSIVATED RECTIFIER

VOLTAGE RANGE - 50 to 1000 Volts

CURRENT - 1.0 Ampere

FEATURES

- * High reliability
- * Low cost
- * Low leakage
- * Low forward voltage drop
- * High current capability
- * Glass passivated junction

MECHANICAL DATA

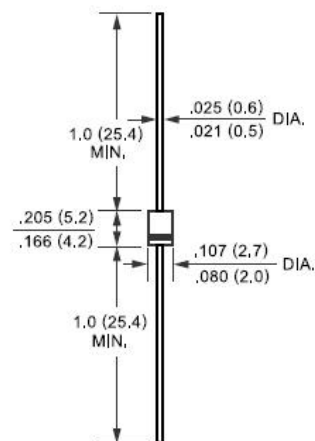
- * Case: Molded plastic
- * Epoxy: UL 94V-0 rate flame retardant
- * Lead: MIL-STD-202E, Method 208 guaranteed
- * Polarity: Color band denotes cathode end
- * Mounting position: Any
- * Weight: 0.33 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.
Single phase, half wave, 60 Hz, resistive or inductive load.
For capacitive load, derate current by 20%.



A-405



Dimensions in inches and (millimeters)

	SYMBOL	RL101G	RL102G	RL103G	RL104G	RL105G	RL106G	RL107G	UNITS	
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	50	100	200	400	600	800	1000	Volts	
Maximum RMS Voltage	V _{RMS}	35	70	140	280	420	560	700	Volts	
Maximum DC Blocking Voltage	V _{DC}	50	100	200	400	600	800	1000	Volts	
Maximum Average Forward Rectified Current at T _A = 75°C	I _O	1.0							Amps	
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	30							Amps	
Maximum Instantaneous Forward Voltage at 1.0A DC	V _F	1.1							Volts	
Maximum DC Reverse Current at Rated DC Blocking Voltage	@T _A = 25°C @T _A = 100°C	I _R	5.0							uAmps
Maximum Full Load Reverse Current Average, Full Cycle .375"(9.5mm) lead length at T _L = 75°C			50							
		I _R	30							uAmps
Typical Junction Capacitance (Note)	C _J		15							
Typical Thermal Resistance	R _{θJA}	50							°C/W	
Operating and Storage Temperature Range	T _J , T _{STG}	-65 to + 175							°C	

NOTES : Measured at 1 MHz and applied reverse voltage of 4.0 volts

RATING AND CHARACTERISTIC CURVES (RL101G THRU RL107G)

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

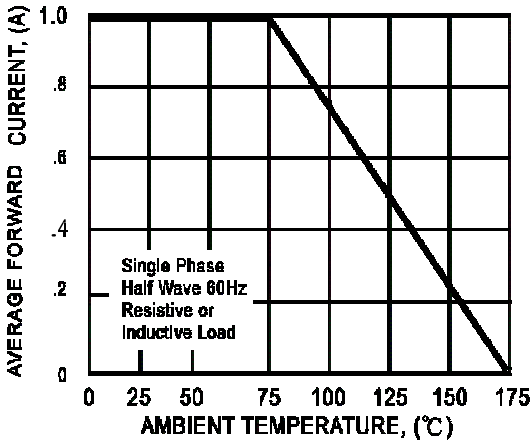


FIG. 2 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

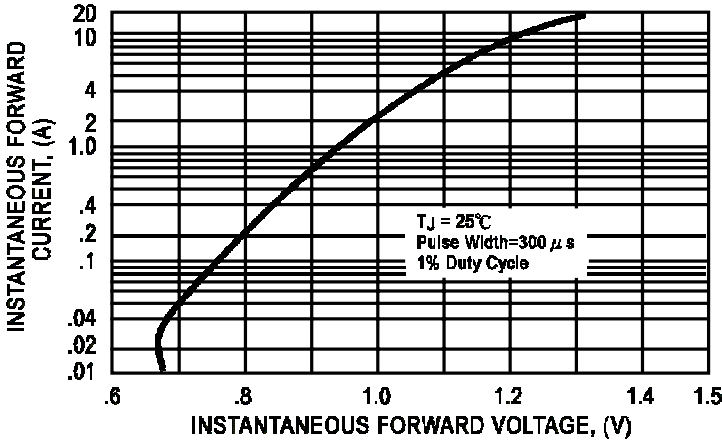


FIG. 3 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

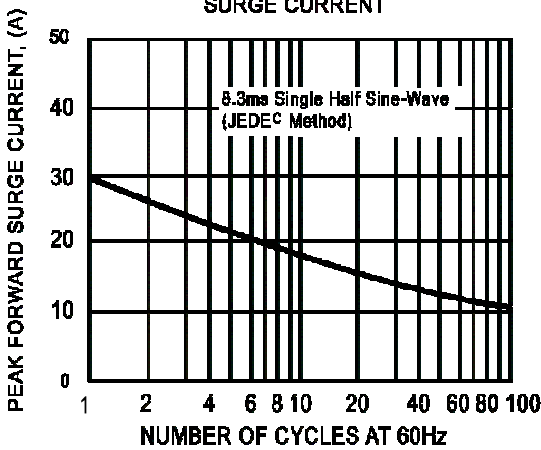


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

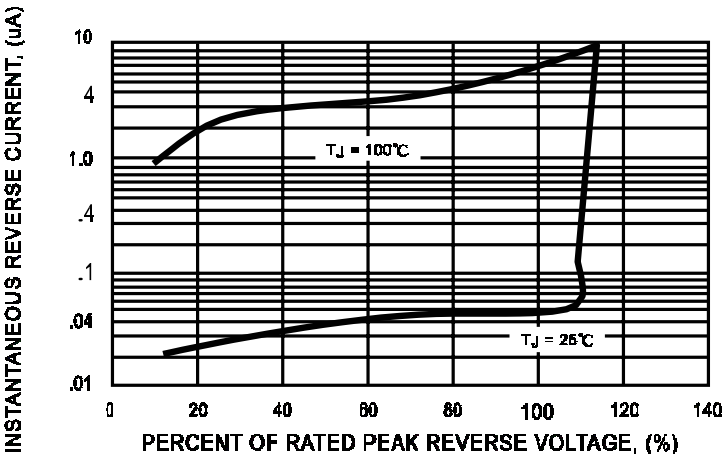


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

