RL101G THRU RL107G

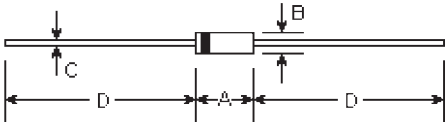
MINIATURE GLASS PASSIVATED JUNCTION RECTIFIER

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

Features

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0 utilizing Flame Retardant Epoxy Molding Compound
- Glass passivated junction version of RL101G thru RL107G in A-405 package
- 1.0 ampere operation at T_A=75℃ with no thermal runaway

A-405



Mechanical Data

- **Case:** Molded plastic, A-405
- **Terminals:** Axial leads, solderable per MIL-STD-202, method 208
- **Polarity:** Color band denotes cathode
- **Mounting Position:** Any
- **Weight:** 0.008 ounce, 0.235 gram

DIMENSIONS					
DIM	inches		mm		Note
	Min.	Max.	Min.	Max.	
A	0.165	0.205	4.2	5.2	
B	0.079	0.106	2.0	2.7	ϕ
C	0.020	0.024	0.5	0.6	ϕ
D	1.000	-	25.40	-	

Maximum Ratings and Electrical Characteristics

Ratings at 25℃ ambient temperature unless otherwise specified.
Single phase, half wave, 60Hz, resistive or inductive load.

	Symbols	RL 101G	RL 102G	RL 103G	RL 104G	RL 105G	RL 106G	RL 107G	Units
Maximum repetitive 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 0.375" (9.5mm) lead length at T_A=75℃	$I_{(AV)}$	1.0							Amp
Peak forward surge current, I_{FM} (surge): 8.3mS single half sine-wave superimposed on rated load (MIL-STD-750D 4066 method)	I_{FSM}	30.0							Amps
Maximum forward voltage at 1.0A	V_F	1.1							Volts
Maximum DC reverse current at rated DC blocking voltage T_A=25℃ / T_A=100℃	I_R	5.0 / 100.0							μA
Typical junction capacitance (Note 1)	C_J	15.0							pF
Typical thermal resistance (Note 2)	$R_{\theta JA}$	50.0							℃/W
Operating and storage temperature range	T_J, T_{STG}	-55 to +150							℃

Notes:

(1) Measured at 1.0MHz and applied reverse voltage of 4.0 VDC

(2) Thermal resistance junction to ambient

RATINGS AND CHARACTERISTIC CURVES

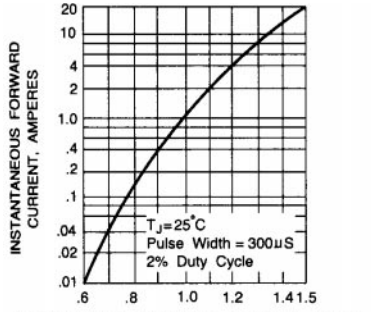


Fig. 1 – TYPICAL FORWARD CHARACTERISTICS

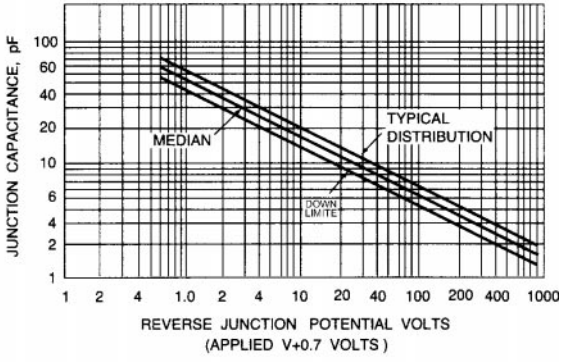


Fig. 2 – JUNCTION CAPACITANCE

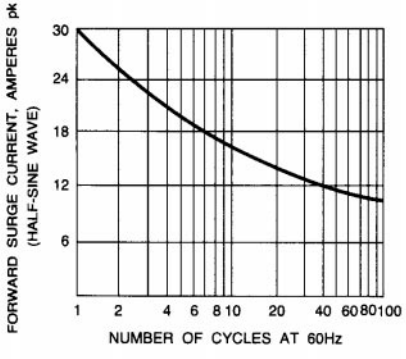


Fig. 3 – PEAK FORWARD SURGE CURRENT

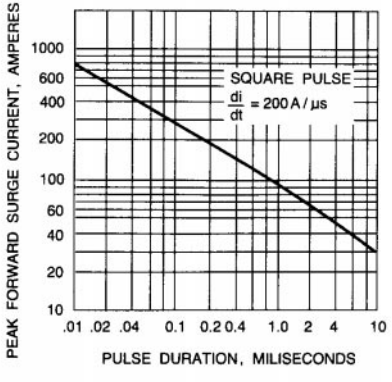


Fig. 4 – PEAK FORWARD SURGE CURRENT

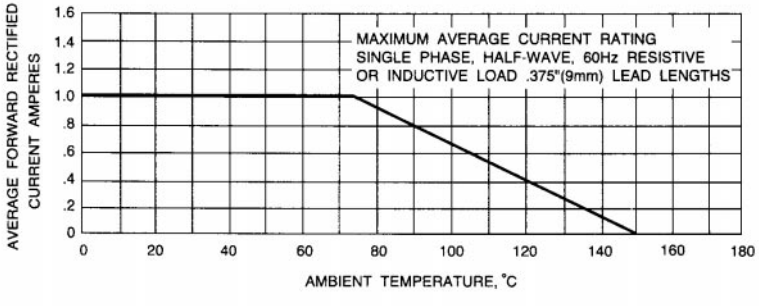


Fig. 5 – FORWARD DERATING CURVE