RL151G THRU RL157G

GW

1.5 AMP GLASS PASSIVATED RECTIFIERS

VOLTAGE RANGE
50 to 1000 Volts
CURRENT
1.5 Amperes

FEATURES

* Low forward voltage drop
* High current capability
* High reliability
* High surge current capability
* Glass passivated junction

MECHANICAL DATA

* Case: Molded plastic
* Epoxy: UL 94V-0 rate flame retardant
* Lead: Axial leads, solderable per MIL-STD-202,
        method 208 guranteed
* Polarity: Color band denotes cathode end
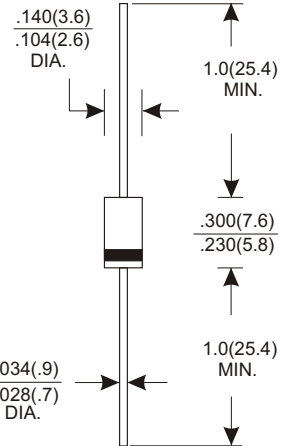* Mounting position: Any
* Weight: 0.40 grams

DO-15

$\frac{.140(3.6)}{.104(2.6)}$ DIA.

1.0(25.4) MIN.

$\frac{.300(7.6)}{.230(5.8)}$

1.0(25.4) MIN.

$\frac{.034(.9)}{.028(.7)}$ DIA.

Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating 25°C ambient temperature uniess otherwies specified.
Single phase half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

TYPE NUMBER	RL151G	RL152G	RL153G	RL154G	RL155G	RL156G	RL157G	UNITS
Maximum Recurrent Peak Reverse Voltage	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current .375"(9.5mm) Lead Length at Ta=75°C				1.5				A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)				50				A
Maximum Instantaneous Forward Voltage at 1.5A				1.1				V
Maximum DC Reverse Current Ta=25°C				5.0				μA
at Rated DC Blocking Voltage Ta=100°C				50				μA
Typical Junction Capacitance (Note 1)				20				pF
Typical Thermal Resistance R JA (Note 2)				50				°C/W
Operating and Storage Temperature Range T_J, T_{STG}				-65 — +175				°C

NOTES:

1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

2. Thermal Resistance from Junction to Ambient .375" (9.5mm) lead length.

RATING AND CHARACTERISTIC CURVES (RL151G THRU RL157G)
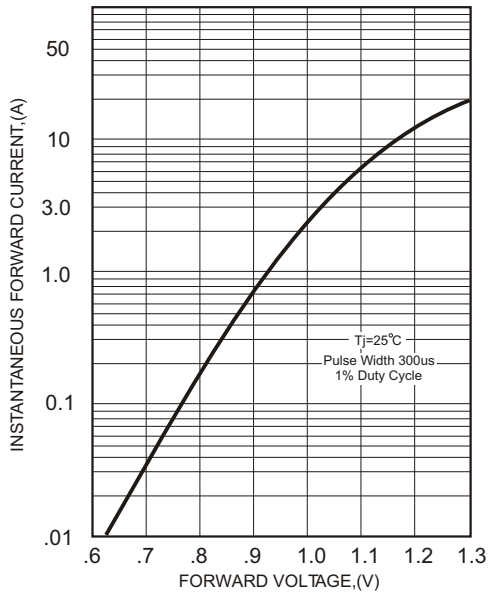
FIG.1-TYPICAL FORWARD CHARACTERISTICS

Tj=25°C
Pulse Width 300us
1% Duty Cycle

INSTANTANEOUS FORWARD CURRENT,(A)

FORWARD VOLTAGE,(V)

FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

Single Phase
Half Wave 60Hz
Resistive Or Inductive Load
0.375"(9.5mm) Lead Length

AVERAGE FORWARD CURRENT,(A)

AMBIENT TEMPERATURE,(°C)
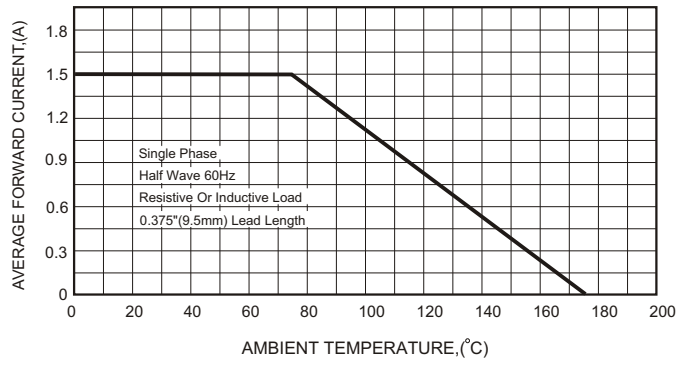
FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

Tj=25°C

8.3ms Single Half
Sine Wave
JEDEC method

PEAK FORWARD SURGE CURRENT,(A)

NUMBER OF CYCLES AT 60Hz
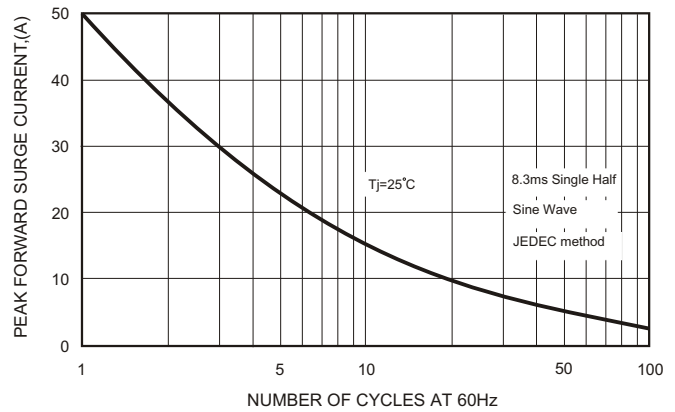
FIG.3 - TYPICAL REVERSE CHARACTERISTICS

Tj=100°C

Tj=25°C

REVERSE LEAKAGE CURRENT, (μA)

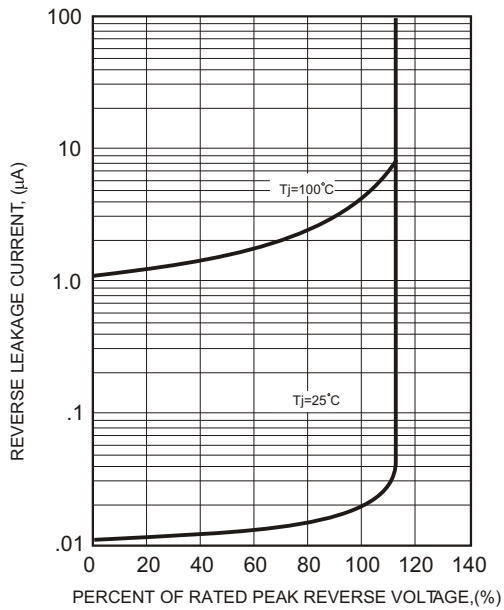PERCENT OF RATED PEAK REVERSE VOLTAGE,(%)

FIG.5-TYPICAL JUNCTION CAPACITANCE

JUNCTION CAPACITANCE,(pF)

REVERSE VOLTAGE,(V)