

# GLASS PASSIVATED JUNCTION RECTIFIER

# RL251G THRU RL257G

Vishaymas General Semiconductor

## Features

- The plastic package carries Underwrites Laboratory Flammability Classification 94V-0
- High current capability
- Low reverse leakage
- Glass passivated junction
- Low forward voltage drop
- High temperature soldering guaranteed : 350°C/10 seconds, 0.375"(9.5mm) lead length, 5lbs.(2.3kg) tension

## Mechanical Data

**Case :** JEDEC DO-15 molded plastic body

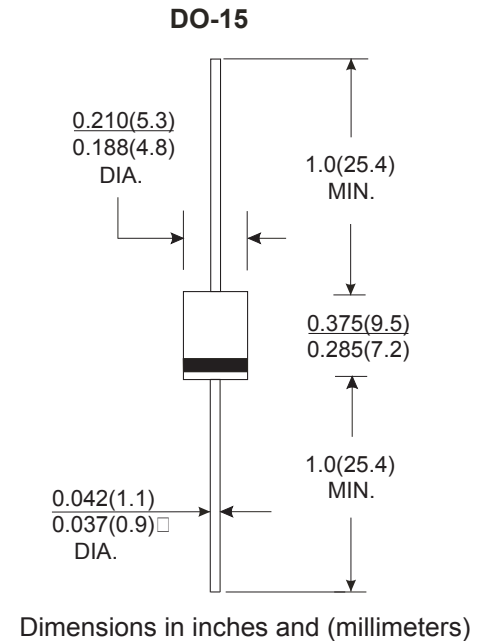
**Terminals :** Lead solderable per

MIL-STD-750,method 2026

**Polarity :** Color band denotes cathode end

**Mounting Position :** Any

**Weight :** 0.021 ounce, 0.60 gram



## Maximum Ratings And Electrical Characteristics

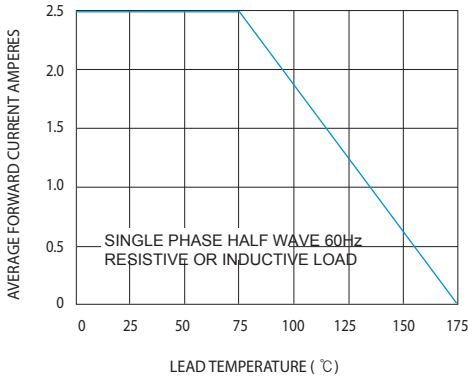
(Ratings at 25°C ambient temperature unless otherwise specified, Single phase, half wave 60Hz, resistive or inductive load. For capacitive load, derate by 20%)

	Symbols	RL 251G	RL 252G	RL 253G	RL 254G	RL 255G	RL 256G	RL 257G	Units
Maximum recurrent peak reverse voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	Volts
Maximum RMS voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	Volts
Maximum DC blocking voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	Volts
Maximum average forward rectified current 0.375"(9.5mm) lead length T <sub>A</sub> =75°C	I <sub>(AV)</sub>	2.5							Amps
Peak forward surge current 8.3ms half sine wave superimposed on rated load (JEDEC method)	I <sub>FSM</sub>	150.0							Amps
Maximum instantaneous forward voltage at 2.5A	V <sub>F</sub>	1.1							Volts
Maximum reverse current at rated DC blocking voltage	T <sub>A</sub> =25°C	5.0							μA
	T <sub>A</sub> =100°C	50.0							
Typical thermal resistance (Note 2)	R <sub>θJA</sub>	35.0							°C/W
Typical junction capacitance (Note 1)	C <sub>J</sub>	35.0							pF
Operating and storage temperature range	T <sub>J</sub> T <sub>STG</sub>	-50 to +175							°C

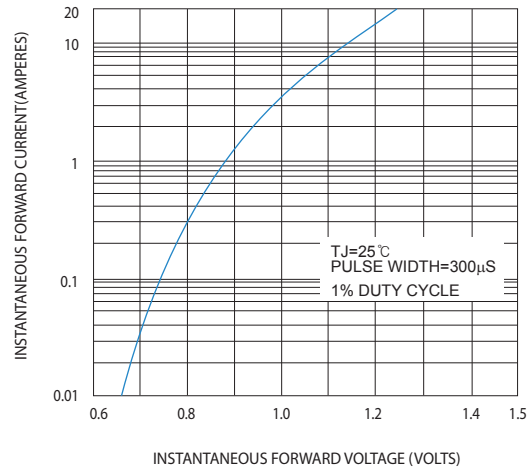
## Notes:

- (1) Measured at 1MHz and applied reverse voltage of 4.0V DC.
- (2) Thermal resistance from junction to ambient at 0.375"(9.5mm) lead length, P.C.B. mounted

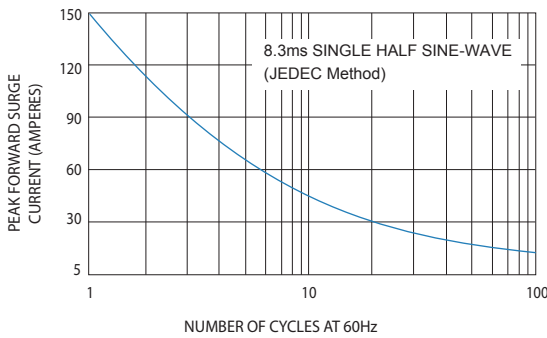
**FIG.1-FORWARD CURRENT DERATING CURVE**



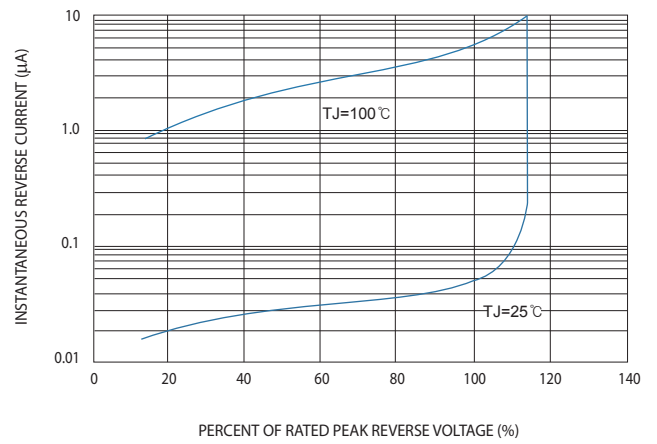
**FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS**



**FIG.3-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT**



**FIG.4-TYPICAL REVERSE CHARACTERISTICS**



**FIG.5-TYPICAL JUNCTION CAPACITANCE**

