

Glass/Silicon Passivated Rectifiers

Type PR - RL251(G/S) Thru RL257(G/S)

Reverse Voltage - 50 to 1000 Volts

Forward Current - 2.5 Amperes

△ Features

- Low cost
- Diffused junction
- Low forward voltage drop
- Low reverse leakage current
- High current capability
- The plastic material carries UL recognition 94V-0

△ Mechanical Data

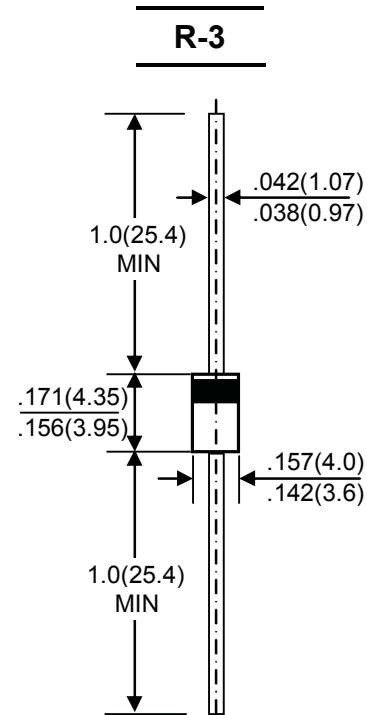
- Case: JEDEC R-3 molded plastic
- Polarity: Color band denotes cathode
- Weight: 0.021 ounces, 0.58 grams
- Mounting position: Any

△ Maximum Ratings and Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitance load, derate current by 20%

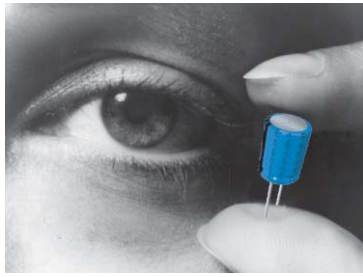


Dimensions in inches and (millimeters)

Fixed Component Diodes

CHARACTERISTICS	SYMBOL	RL251	RL252	RL253	RL254	RL255	RL256	RL257	UNIT
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V _{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V _{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current @T _A =70°C	I _(AV)	2.5							A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load(JEDEC Method)	I _{FSM}	150							A
Maximum Peak Forward Voltage at 2.5A DC	V _F	1.0							V
Maximum DC Reverse Current at Rated DC Blocking Voltage @T _J =25°C @T _J =100°C	I _R	5.0							uA
Typical Junction Capacitance (Note1)	C _J	25							pF
Typical Thermal Resistance (Note2)	R _{θJA}	30							°C/W
Operating Temperature Range	T _J	-55 to +150							°C
Storage Temperature Range	T _{STG}	-55 to +150							°C

NOTES:1.Measured at 1.0 MHz and applied reverse voltage of 4.0V DC
2.Thermal resistance junction of ambient.



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Δ Rating and Characteristics Curves

FIG. 1 – FORWARD CURRENT DERATING

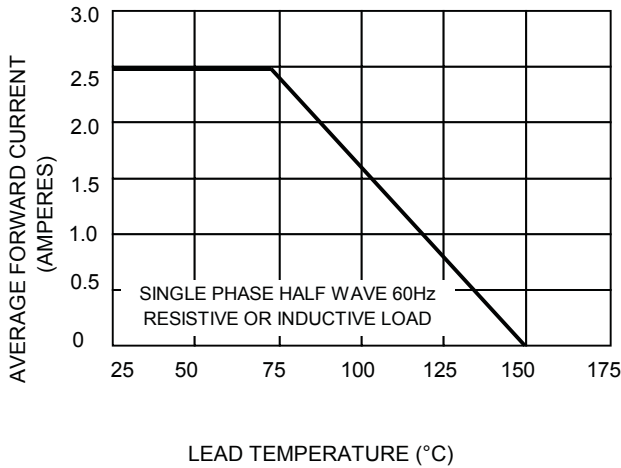


FIG. 2 – MAXIMUM NON-REPETITIVE SURGE CURRENT

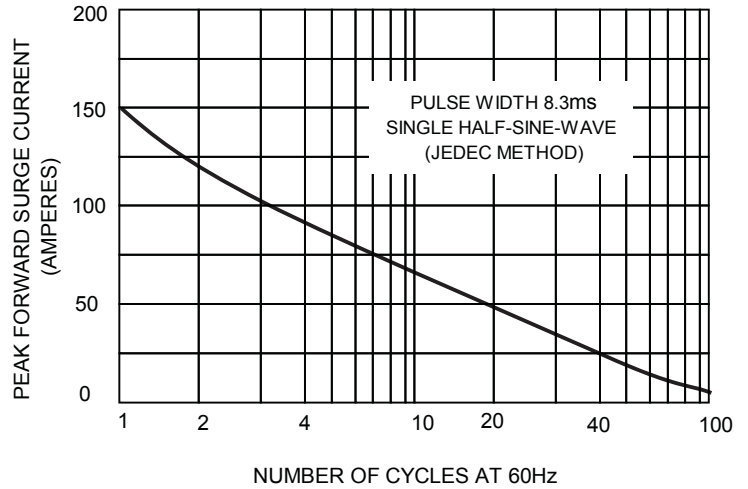


FIG.3 – TYPICAL JUNCTION CAPACITANCE

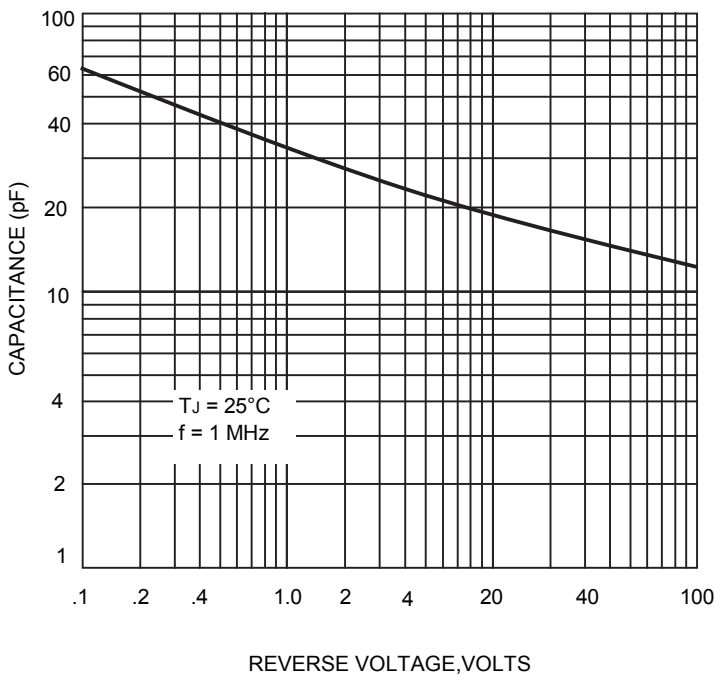
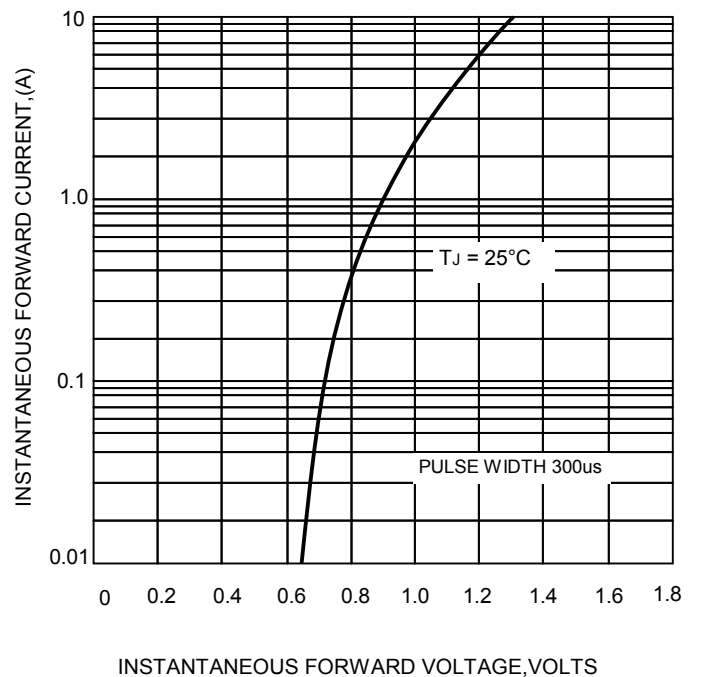


FIG.4-TYPICAL FORWARD CHARACTERISTICS



Fixed Component Diodes