

CURRENT 2.5 Ampere  
 VOLTAGE RANG 50 to 1000 Volts

**RL251 THRU RL257**

**FEATURES**

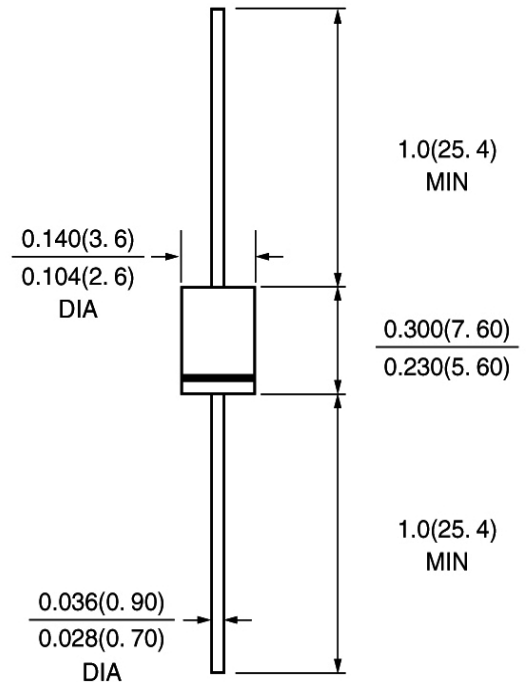
- Low coat construction
- Low forward voltage drop
- Low reverse leakage
- High forward surge current capability
- High temperature soldering guaranteed:  
 260 /10 secods/.375 (9.5mm)lead length at 5 lbs(2.3kg) tension



**MECHANICAL DATA**

- Case: Transfer molded plastic
- Epoxy: UL94V-O rate flame retardant
- Polarity: Color band denotes cathode end
- Lead: Plated axial lead, solderable per MIL-STD-202E method 208C
- Mounting position: Any
- Weight: 0.014 ounce, 0.59 grams

DO-15\DO-204AC



Dimensions in inches and (millimeters)

**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 current by 20%

	SYMBOLS	RL251	RL252	RL253	RL254	RL255	RL256	RL257	UNIT
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 $T_A=50$	$I_{(AV)}$	2.5							Amps
Peak Forward Surge Current 8.3mS single half sine wave superimposed on rated load (JEDEC method)	$I_{FSM}$	30							Amps
Maximum Instantaneous Forward Voltage @2.5A	$V_F$	1.0							Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage per element	$T_A = 25$	5.0							$\mu A$
	$T_A = 100$	50							
Maximum Full Load Reverse Current, full cycle average 0.375 (9.5mm)lead length at $T_L=75$	$I_{R(AV)}$	70							$\mu A$
Typical Junction Capacitance (Note 1)	$C_J$	30							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	40							/W
Operating Junction Temperature Range	$T_J$	-55 to +150							
Storage Temperature Range	$T_{STG}$	-55 to +150							

**Notes:**

1. Measured at 1.0MHz and Applied Reverse Voltage of 4.0V DC.
2. Thermal Resistance from junction to Ambient at .375 (9.5mm)lead length, P.C.board mounted.

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**RATING AND CHARACTERISTIC CURVES RL251 Thru RL257**

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

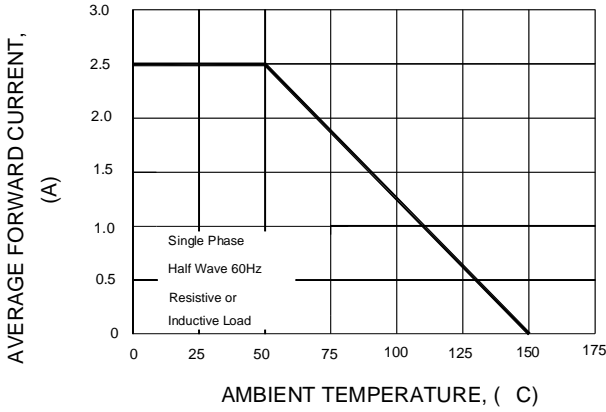


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

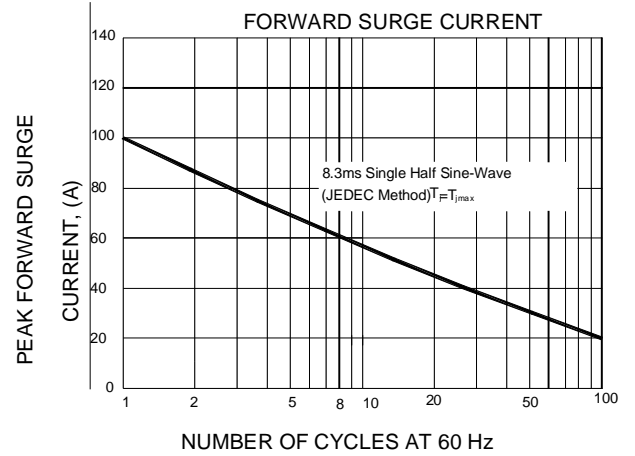


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

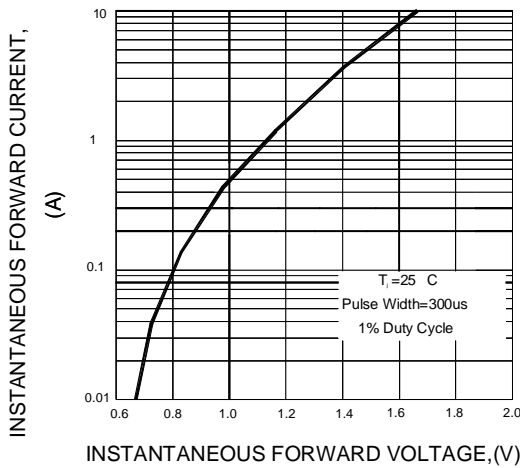


FIG.4-TYPICAL REVERSE CHARACTERISTICS

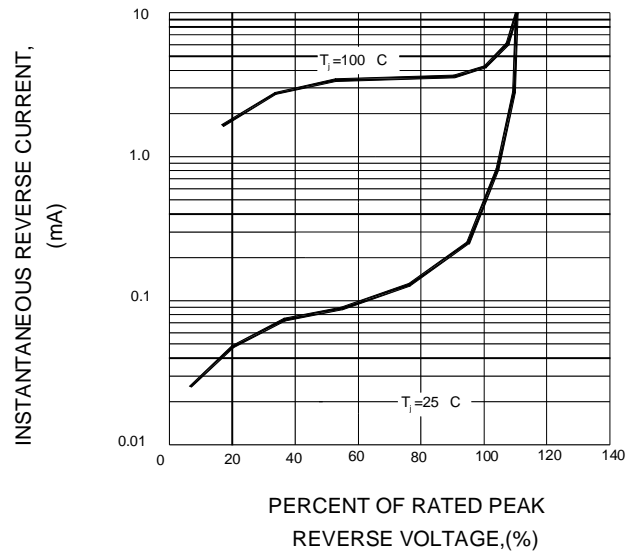


FIG.5-TYPICAL JUNCTION CAPACITANCE

