

RL251 THRU RL257

GENERAL PURPOSE PLASTIC RECTIFIER

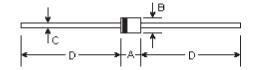
Reverse Voltage - 50 to 1000 Volts

Forward Current - 2.5 Amperes

Features

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- High surge current capability
- 2.5 ampere operation at T_A=75℃ with no thermal runaway
- Low reverse leakage
- Construction utilizes void-free molded plastic technique
- High temperature soldering guaranteed: 250°C/10 seconds, 0.375" (9.5mm) lead length, 5 lbs. (2.3Kg) tension





Mechanical Data

• Case: R-3 molded plastic body

 Terminals: Plated axial leads, solderable per MIL-STD-750, method 2026

• Polarity: Color band denotes cathode end

Mounting Position: Any

• Weight: 0.021 ounce, 0.60 gram

DIMENSIONS										
DIM	inches		m	Note						
	Min.	Max.	Min.	Max.	Note					
Α	0.138	0.161	3.50	4.10						
В	0.138	0.161	3.50	4.10	ф					
С	0.040	0.043	1.00	1.10	ф					
D	1.000	-	25.40	-						

Maximum Ratings and Electrical Characteristics @25℃ unless otherwise specified

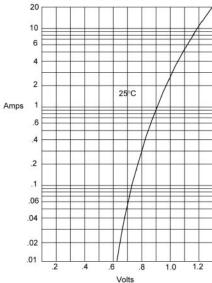
	Symbols	RL251	RL252	RL253	RL254	RL255	RL256	RL257	Units
Maximum repetitive peak reverse voltage	V _{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS voltage	V _{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC blocking voltage	V _{DC}	50	100	200	400	600	800	1000	Volts
Maximum average forward current at $T_{\rm A}$ =75 $^{\circ}{\rm C}$	I _(AV)	2.5							Amps
Peak forward surge current 8.3mS single half sine-wave superimposed on rated load (MIL-STD-750D 4066 method)	I _{FSM}	150.0							Amps
Maximum instantaneous forward voltage at I _{FM} =2.5A, T _A =25 [°] C (Note 2)	V _F	1.0							Volts
Maximum DC reverse current T_=25°C at rated DC blocking voltage T_A=100°C	I _R	5.0 50.0							μА
Typical junction capacitance (Note 1)	C _J	35.0							ρF
Typical thermal resistance	R _{UJA}	35							°C/W
Operating and storage temperature range	T _J , T _{STG}	-65 to +175							$^{\circ}$

Notes:

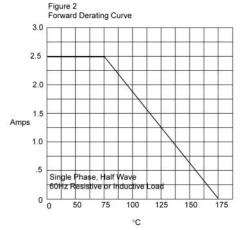
- (1) Measured at 1.0MHz and applied reverse voltage of 4.0 volts
- (2) Pulse test: pulse width 300uSec, Duty cycle 1%

RATINGS AND CHARACTERISTIC CURVES

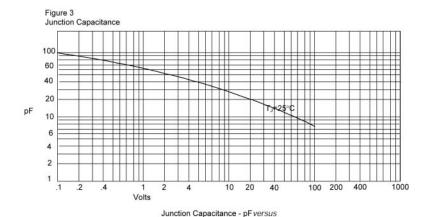
Figure 1 Typical Forward Characteristics



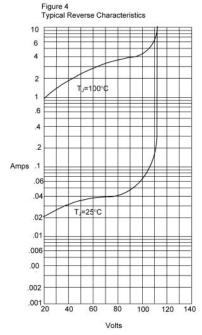
Instantaneous Forward Current - Amperesversus Instantaneous Forward Voltage - Volts



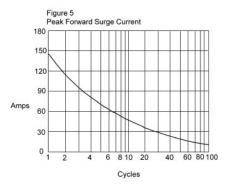
Average Forward Rectified Current - Amperes/ersus Ambient Temperature - $^{\circ}$ C



RATINGS AND CHARACTERISTIC CURVES



Instantaneous Reverse Current - Ampsversus Percent Of Rated Peak Reverse Voltage - Volts



Peak Forward Surge Current - Amperesversus Number Of Cycles At 60Hz - Cycles