

# RLLD005 THRU RLLD10

**FAST SINGLE PHASE GLASS PASSIVATED  
SURFACE MOUNT FLAT BRIDGE RECTIFIER**  
VOLTAGE: 50 to 1000V                      CURRENT: 0.8A

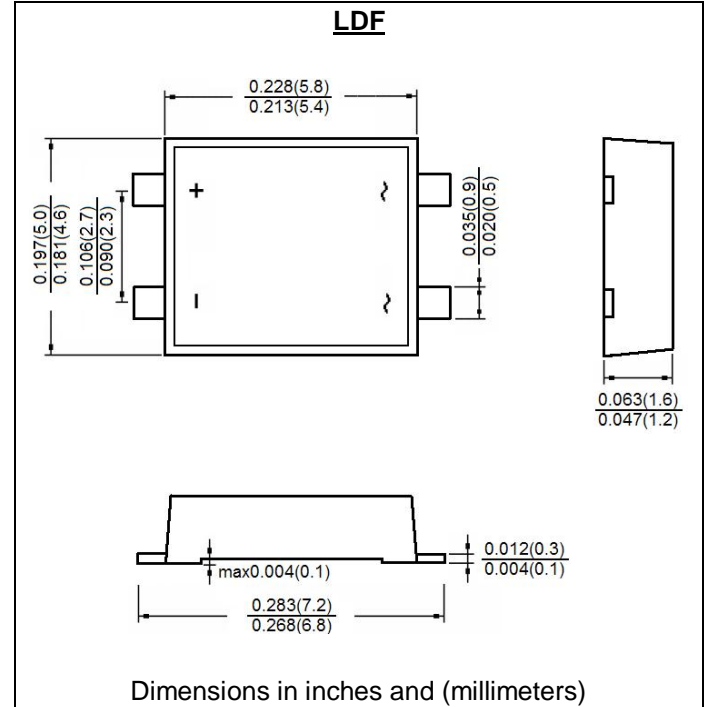


## FEATURE

- Low profile space
- Ideal for automated placement
- Glass passivated chip
- Fast recovery time for high efficiency
- Low forward voltage drop
- Low leakage current
- High forward surge capability
- High temperature soldering: 260°C/10 seconds

## MECHANICAL DATA

- Terminal: Plated leads solderable per J-STD-002
- Case: UL-94 Class V-0 recognized Flame Retardant Epoxy
- Polarity: Polarity symbol marked on body



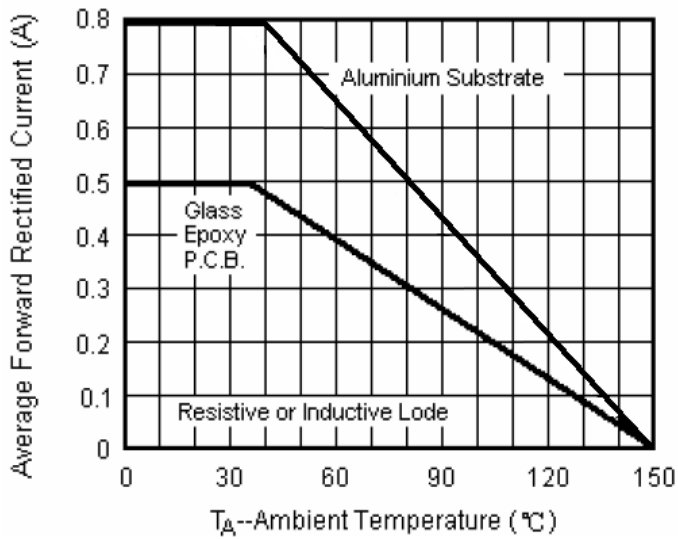
## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(single-phase, half -wave, 60HZ, resistive or inductive load rating at 25°C, unless otherwise stated)

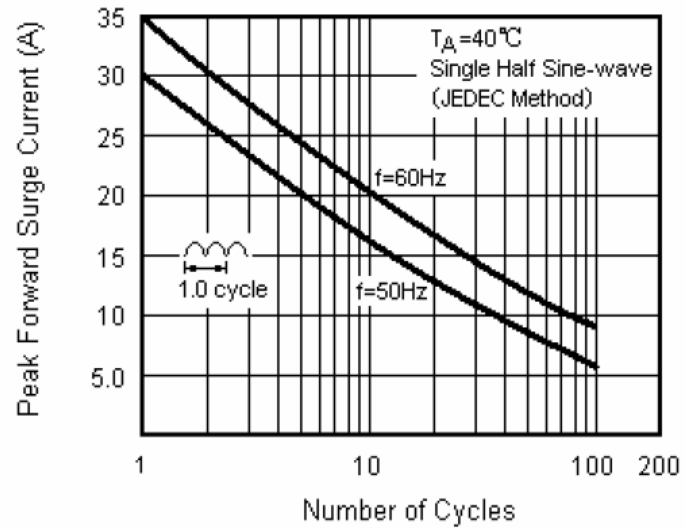
	SYMBOL	RLLD 005	RLLD 01	RLLD 02	RLLD 04	RLLD 06	RLLD 08	RLLD 10	units
Maximum Recurrent Peak Reverse Voltage	V <sub>rrm</sub>	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V <sub>rms</sub>	35	70	140	280	420	560	700	V
Maximum DC blocking Voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current at Ta =40°C	I <sub>f(av)</sub>	0.8							A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I <sub>fsm</sub>	35.0							A
Maximum Instantaneous Forward Voltage at forward current 0.4A	V <sub>f</sub>	1.3							V
Maximum Reverse Recovery Time (Note 1)	T <sub>rr</sub>	150					200		nS
Maximum DC Reverse Current Ta =25°C at rated DC blocking voltage Ta =125°C	I <sub>r</sub>	5.0 100.0							µA
Typical Thermal resistance (Note2)	R <sub>th(ja)</sub> R <sub>th(jl)</sub>	70 20							°C/W
Typical Junction Capacitance (Note3)	C <sub>j</sub>	15.0							pF
Storage and Operating Junction Temperature Range	T <sub>stg</sub> , T <sub>j</sub>	-55 to +150							°C

- Note:
- Reverse Recovery Condition I<sub>F</sub> = 0.5A, I<sub>R</sub> = 1.0A, I<sub>RR</sub> = 0.25A
  - On aluminum substrate P.C.B. with an area of 0.8" × 0.8" (20 × 20mm) mounted on 0.05 × 0.05" (1.3 × 1.3mm) solder pad
  - Measured at 1.0 MHz and applied voltage of 4.0 volt

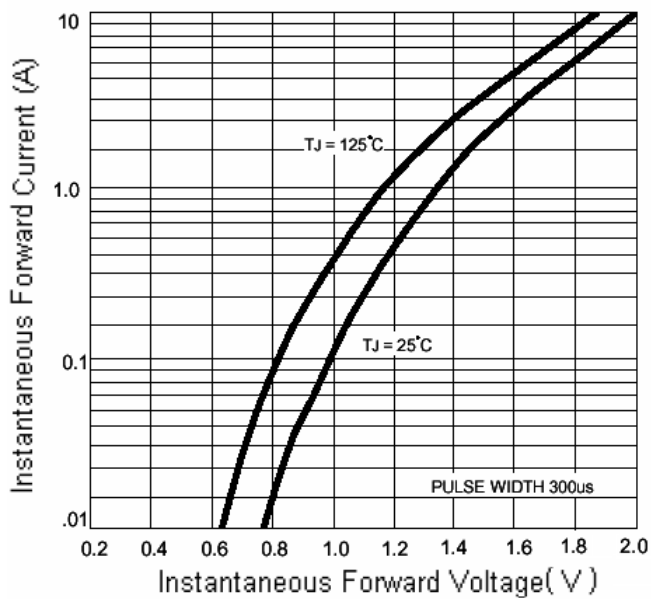
**Fig.1 Derating Curve For Output Rectified Current**



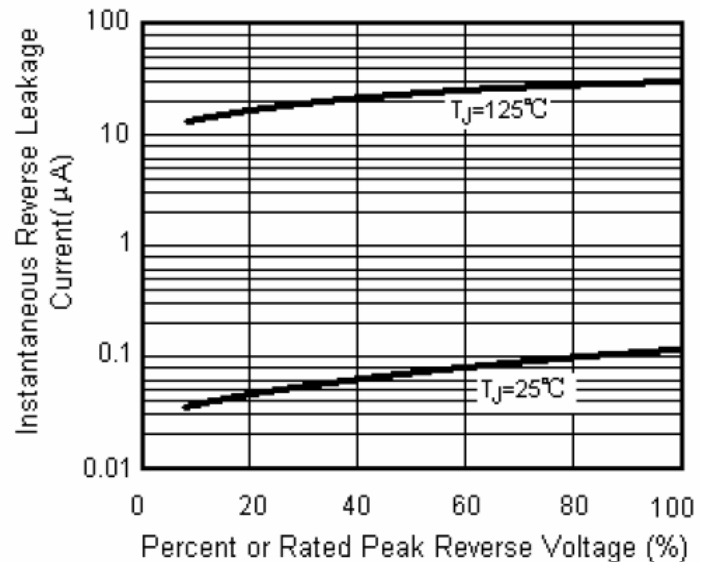
**Fig.2 Maximum Non-Repetitive Peak Forward Surge Current Per Leg**



**Fig.3 Typical Forward Voltage Characteristics Per Leg**



**Fig.4 Typical Reverse Leakage Characteristics Per Leg**



**Fig.5 Typical Junction Capacitance Per Leg**

