RLD005 THRU RLD10

FAST SINGLE PHASE GLASS PASSIVATED SURFACE MOUNT FLAT BRIDGE RECTIFIER

VOLTAGE: 50 to 1000V **CURRENT: 0.6A**

VOLTARISTECH INC.
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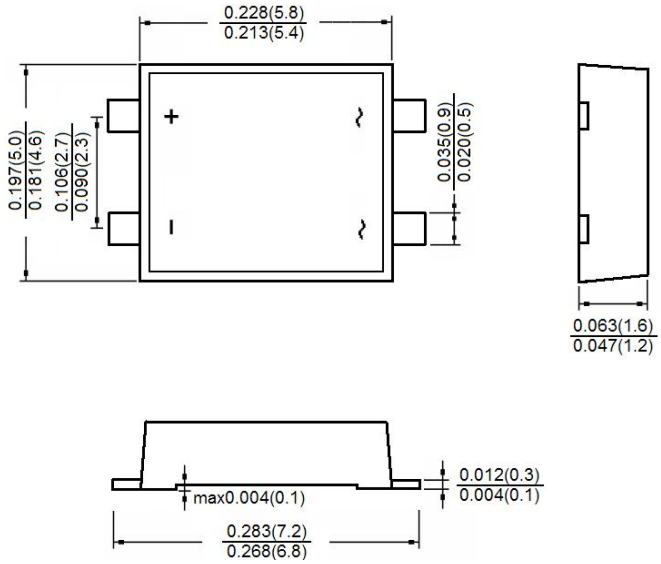
FEATURE

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℃/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

LDF



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

	SYMBOL	RLD005	RLD01	RLD02	RLD04	RLD06	RLD08	RLD10	Units
Maximum Recurrent Peak Reverse Voltage	Vrrm	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	Vrms	35	70	140	280	420	560	700	V
Maximum DC blocking Voltage	VDC	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current at Ta =40°C	If(av)	0.6							A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	Ifsm	20.0							A
Maximum Instantaneous Forward Voltage at forward current 0.3A	Vf	1.3							V
Maximum DC Reverse Current Ta =25°C at rated DC blocking voltage Ta =125°C	Ir	5.0 100.0							μA
Maximum Reverse Recovery Time (Note 1)	Trr	150					200		nS
Typical Thermal resistance (Note2)	Rth(ja) Rth(jl)	70 20							°C/W
Typical Junction Capacitance (Note3)	Cj	13.0							pF
Storage and Operating Junction Temperature Range	Tstg, Tj	-55 to +150							°C

Note:

1. Reverse Recovery Condition I_F = 0.5A, I_R = 1.0A, I_{RR} = 0.25A
2. 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
3. Measured at 1.0 MHz and applied voltage of 4.0 volt

Fig.1 Derating Curve For Output Rectified Current

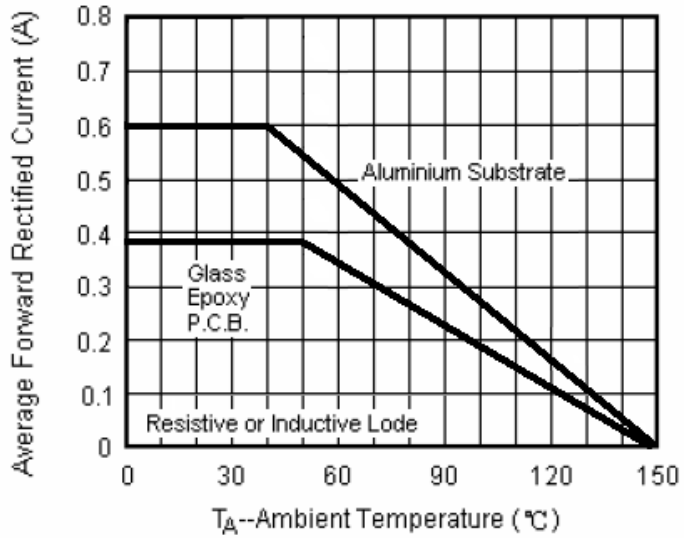


Fig.2 Maximum Non-Repetitive Peak Forward Surge Current Per Leg

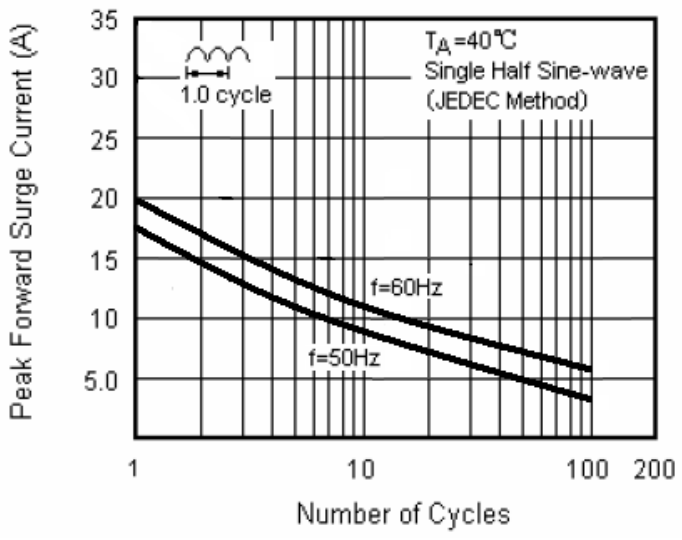


Fig.3 Typical Forward Voltage Characteristics Per Leg

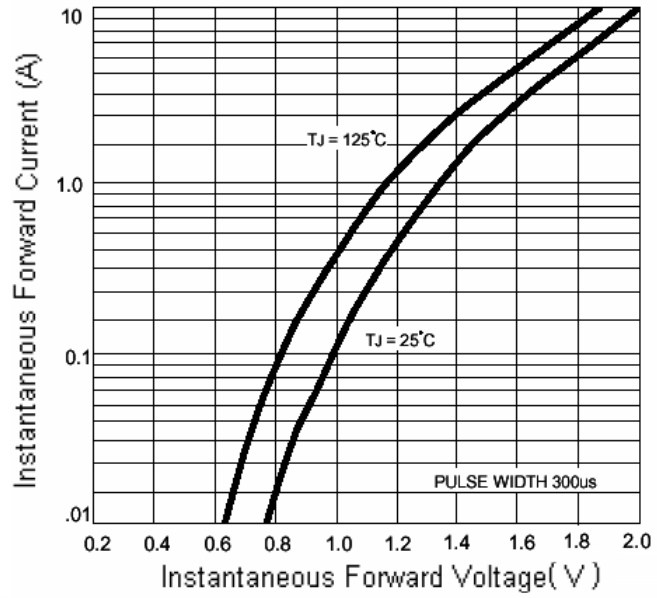


Fig.4 Typical Reverse Leakage Characteristics Per Leg

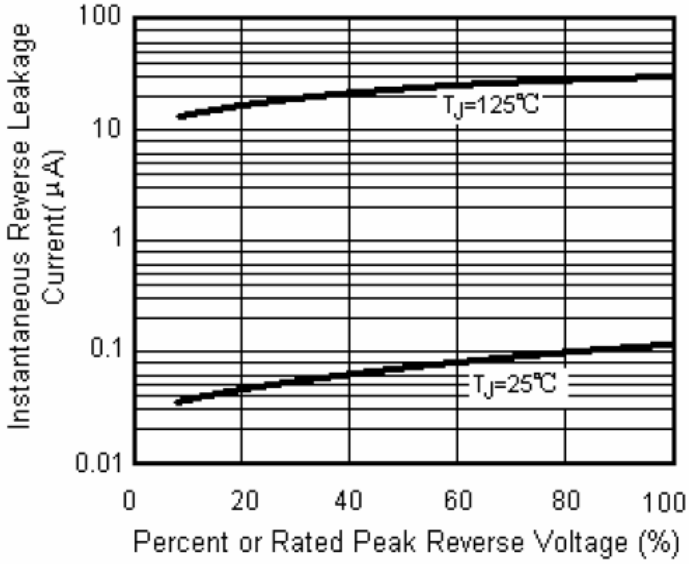


Fig.5 Typical Junction Capacitance Per Leg