

LD005 THRU LD10

SINGLE PHASE GLASS PASSIVATED
SURFACE MOUNT FLAT BRIDGE RECTIFIER
VOLTAGE: 50 TO 1000V CURRENT: 0.6A



FEATURE

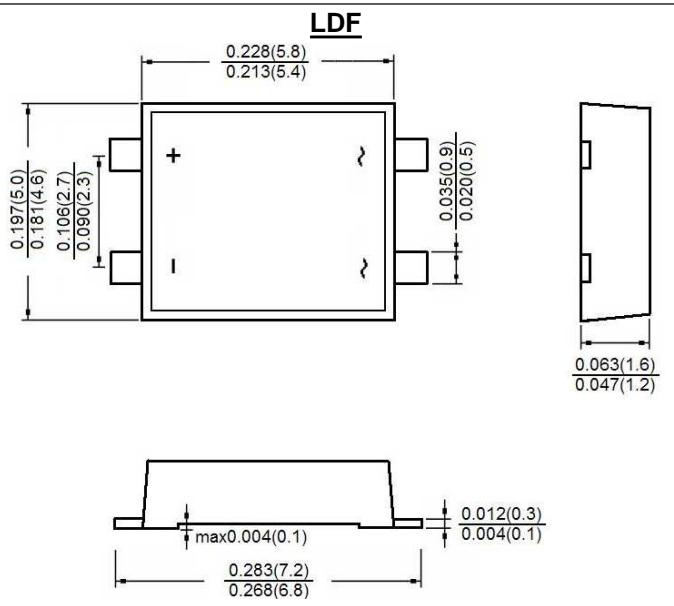
Low profile space
Ideal for automated placement
Glass passivated chip
Low forward voltage drop
Low leakage current
High forward surge capability
High temperature soldering: 260°C/10 seconds at terminals

MECHANICAL DATA

Terminal: Plated leads solderable per
MIL-STD 202E, method 208C

Case: UL-94 Class V-0 recognized Flame Retardant Epoxy

Polarity: Polarity symbol marked on body



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,
for capacitive load, derate current by 20%)

	SYMBOL	LD 005	LD 01	LD 02	LD 04	LD 06	LD 08	LD 10	Units
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 at Ta =40°C	I _{f(av)}						0.6		A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I _{fsm}						20.0		A
Maximum Instantaneous Forward Voltage at forward current 0.3A	V _f					1.0			V
Maximum DC Reverse Current Ta =25°C at rated DC blocking voltage Ta =125°C	I _r				5.0	100.0			µA
Typical Thermal resistance (Note1)	R _{th(ja)} R _{th(jl)}				70	20			°C/W
Typical Junction Capacitance (Note2)	C _j				13.0				pF
Storage and Operating Junction Temperature Range	T _{stg} , T _j				-55 to +150				°C

Note:

1. 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
2. Measured at 1.0 MHz and applied voltage of 4.0 volt

RATINGS AND CHARACTERISTIC CURVES LD005 THRU LD10

Fig.1 Derating Curve For Output Rectified Current

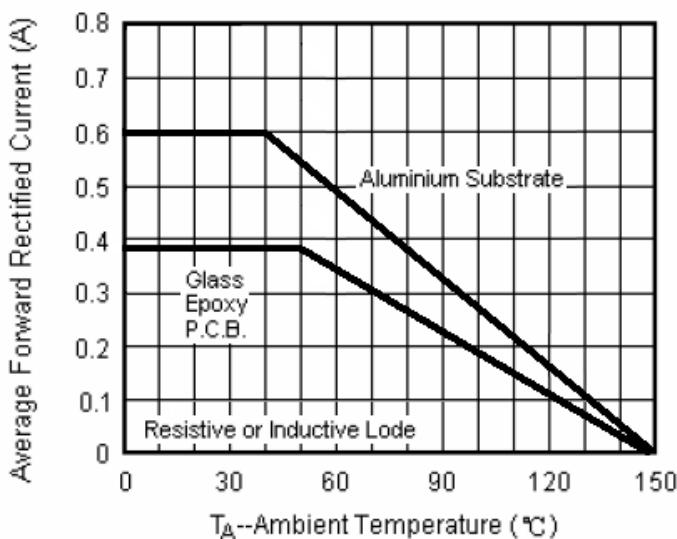


Fig.2 Maximum Non-Repetitive Peak Forward Surge Current Per Leg

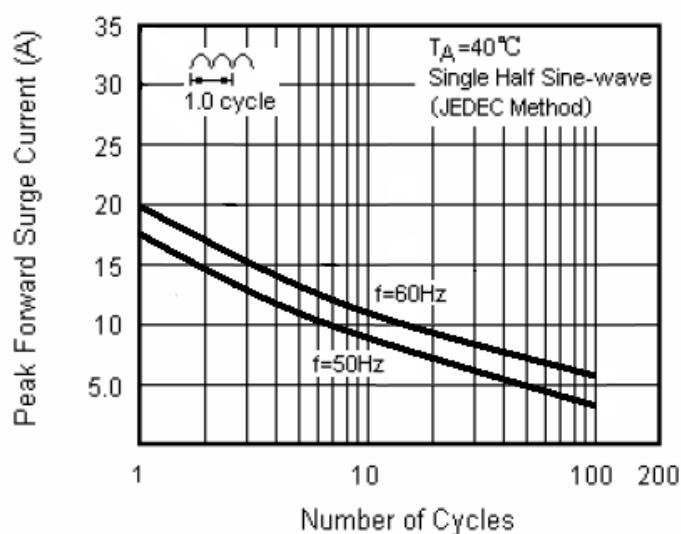


Fig.3 Typical Forward Voltage Characteristics Per Leg

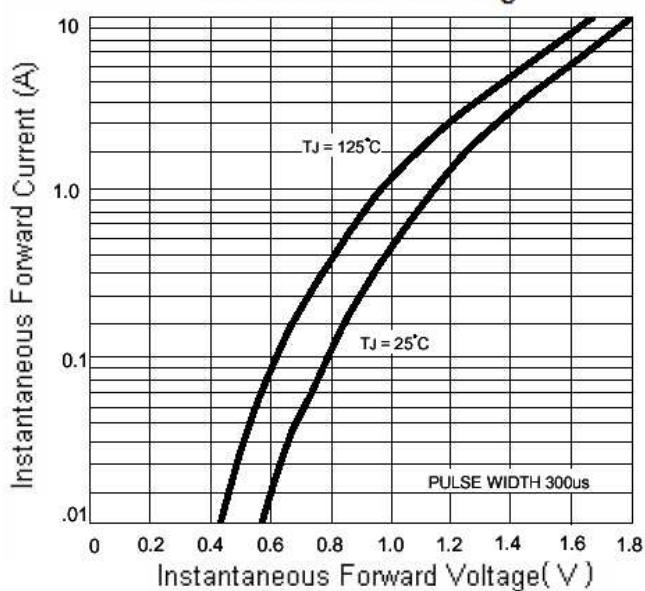


Fig.4 Typical Reverse Leakage Characteristics Per Leg

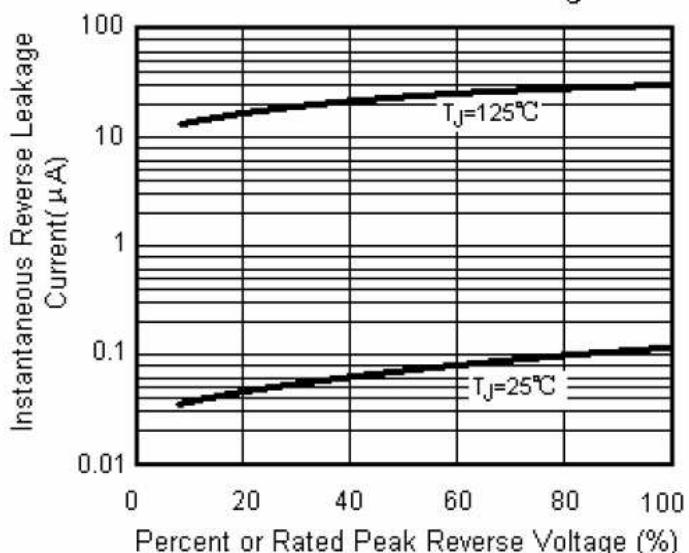


Fig.5 Typical Junction Capacitance Per Leg

