LLB005 THRU LLB10

SINGLE PHASE GLASS PASSIVATED SURFACE MOUNT FLAT BRIDGE RECTIFIER

VOLTAGE: 50 to 1000V **CURRENT: 1.0A**

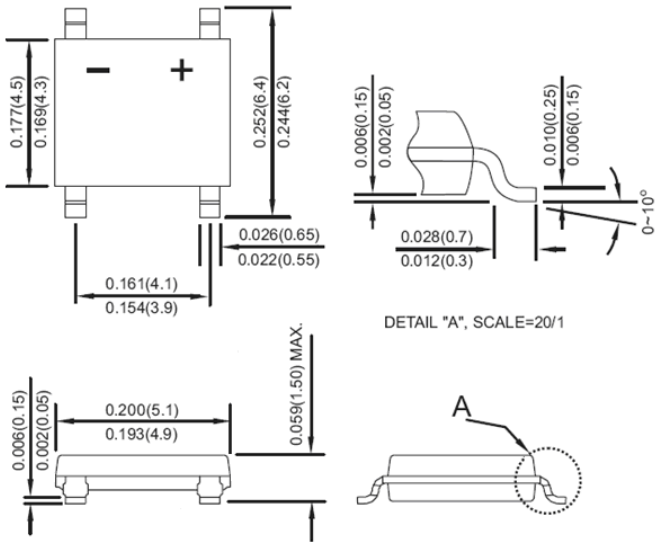
FEATURE

Ideal for printed circuit board
Glass passivated chip
Reliable low cost construction utilizing molded plastic technique
High surge current capability
Small size, simple installation
High temperature soldering guaranteed: 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

LBF



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	LLB 005	LLB 01	LLB 02	LLB 04	LLB 06	LLB 08	LLB 10	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 — on aluminum substrate on glass-epoxy P.C.B.	If(av)	1.0 0.8							A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	Ifsm	30.0							A
Rating for fusing(t＜8.3ms)	I^2t	3.9							A^2sec
Maximum Instantaneous Forward Voltage at forward current 0.4A	Vf	0.95							V
Maximum DC Reverse Current — Ta =25℃ at rated DC blocking voltage — Ta =125℃	Ir	5.0 100.0							μA
Typical Thermal resistance — junction to lead Junction to case on aluminum substrate on glass-epoxy P.C.B.	Rth(jl) Rth(jc) Rth(ja)	25 20 62.5 80							℃/W
Storage and Operating Junction Temperature Range	Tstg, Tj	-55 to +150							℃

Note:

RATINGS AND CHARACTERISTIC CURVES LLB005 THRU LLB10

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

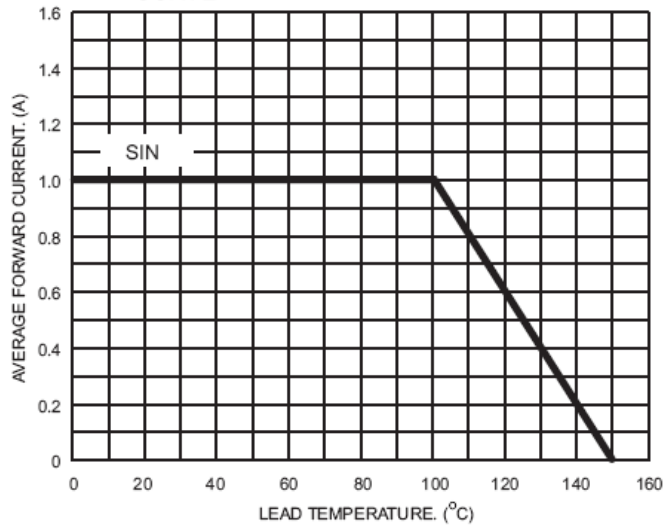


FIG.2- TYPICAL FORWARD CHARACTERISTICS

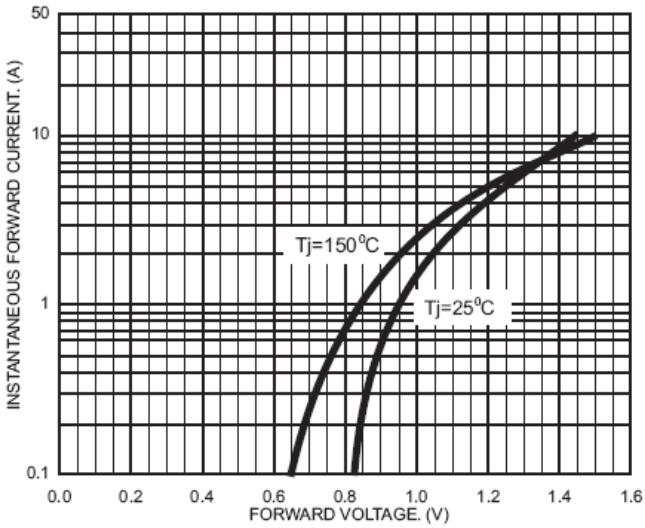


FIG.3- MAXIMUM FORWARD CURRENT DERATING CURVE

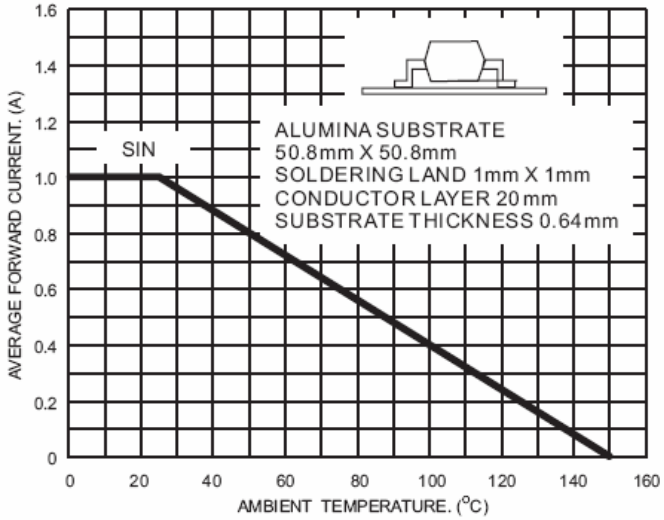


FIG.4- FORWARD POWER DISSIPATION

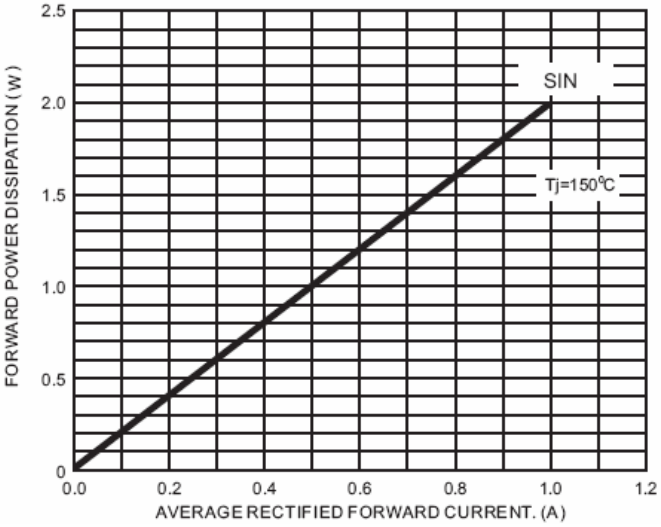
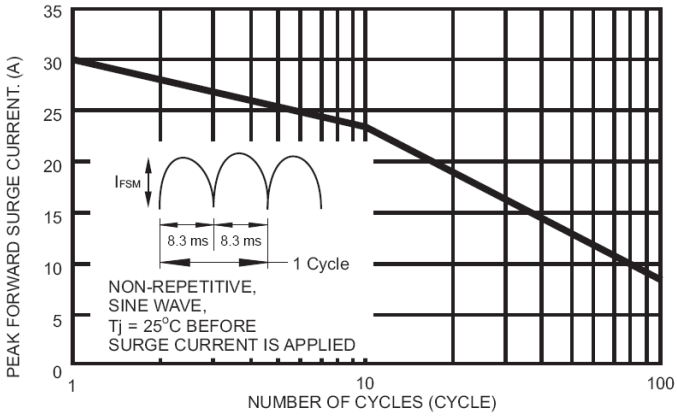
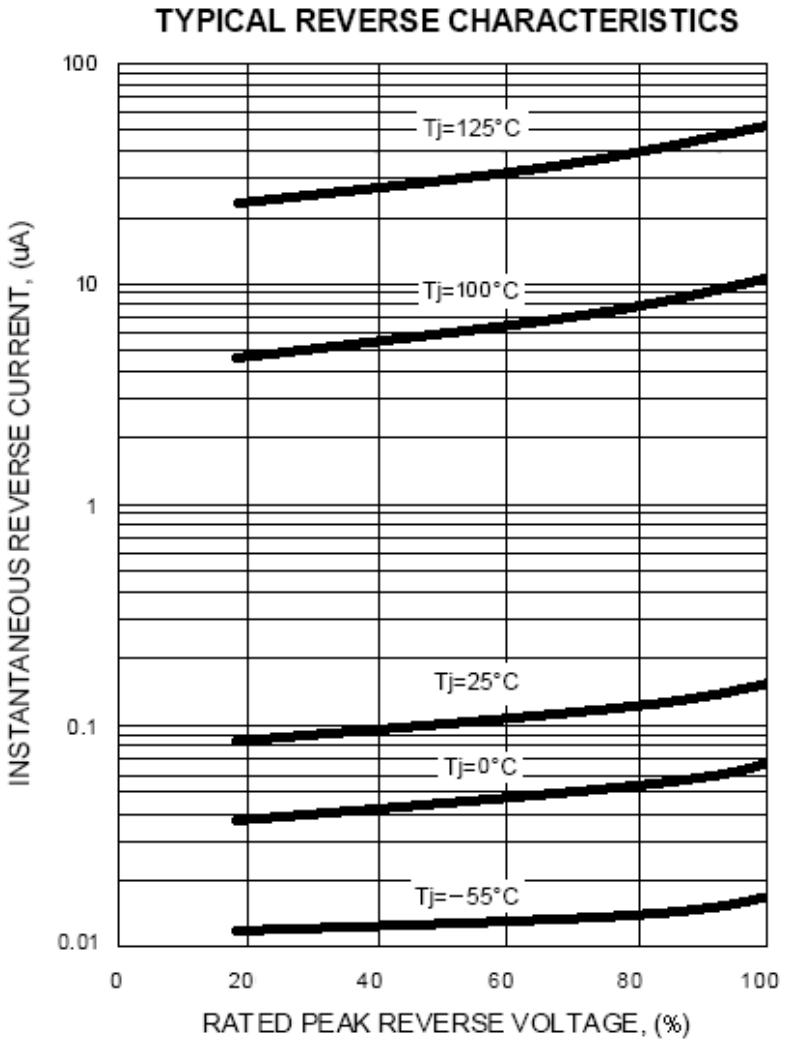
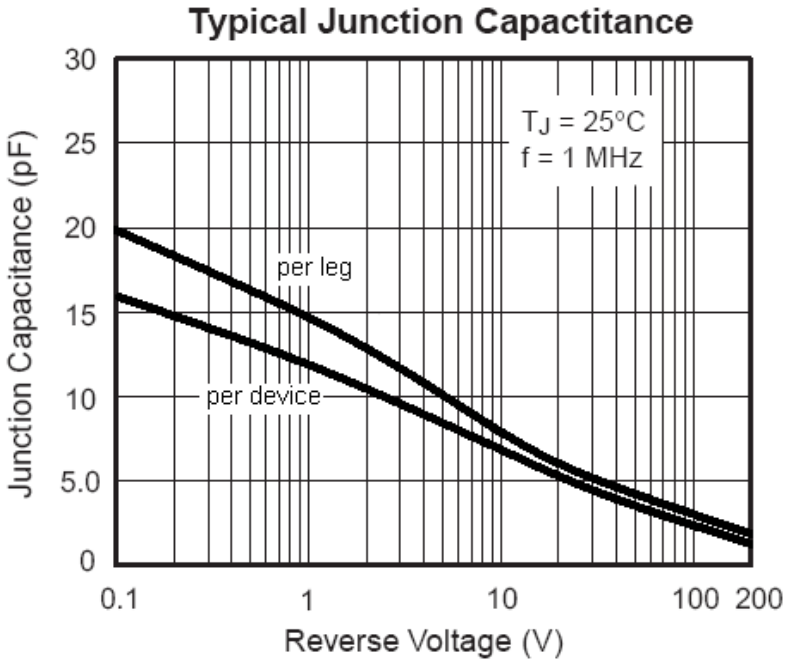


FIG.5- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT




TYPICAL REVERSE CHARACTERISTICS
INSTANTANEOUS REVERSE CURRENT, (uA)
100
10
1
0.1
0.01
Tj=125°C
Tj=100°C
Tj=25°C
Tj=0°C
Tj=−55°C
0
20
40
60
80
100
RATED PEAK REVERSE VOLTAGE, (%)


Typical Junction Capactitance
Junction Capacitance (pF)
30
25
20
15
10
5.0
0
TJ = 25°C
f = 1 MHz
per leg
per device
0.1
1
10
100
200
Reverse Voltage (V)