

# LLB005-47L THRU LLB10-47L

**SINGLE PHASE GLASS PASSIVATED  
SURFACE MOUNT FLAT BRIDGE RECTIFIER**  
VOLTAGE: 50 to 1000V      CURRENT: 1.0A

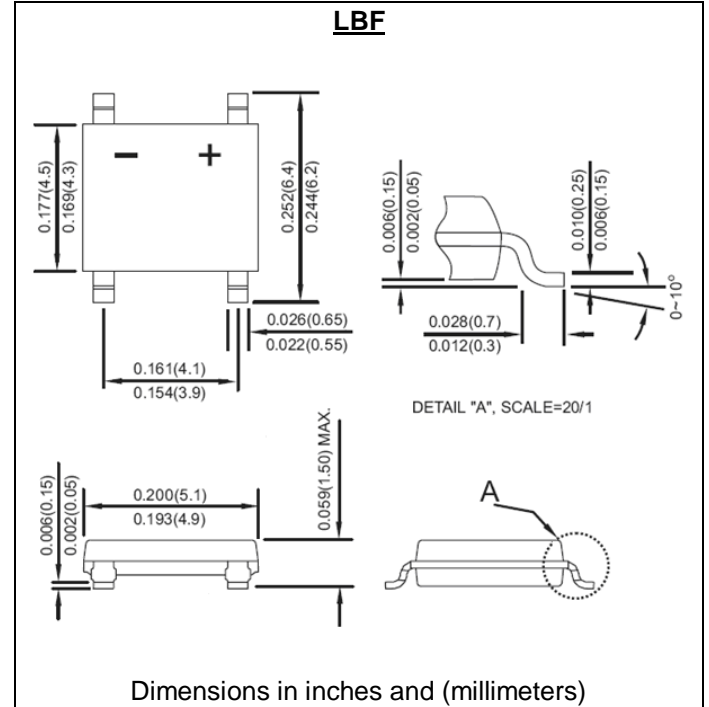


## FEATURE

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°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	LLB0 05- 47L	LLB0 1- 47L	LLB0 2- 47L	LLB0 4- 47L	LLB0 6- 47L	LLB0 8- 47L	LLB1 0- 47L	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 on aluminum substrate on glass-epoxy P.C.B.	I <sub>f(av)</sub>				1.0 0.8				A
Peak Forward Surge Current 10ms single half sine-wave superimposed on rated load	I <sub>fsm</sub>				30				A
Peak Forward Surge Current (1ms 1 cycle)	I <sub>fsm</sub>				60				A
Maximum Instantaneous Forward Voltage at forward current 0.4A	V <sub>f</sub>				0.95				V
Rating for fusing(t<8.3ms)	I <sup>2</sup> t				3.9				A <sup>2</sup> sec
Maximum DC Reverse Current at rated DC blocking voltage	I <sub>r</sub>				5.0 100.0				μA
Non Repetitive Reverse Avalanche Energy at I <sub>BR(R)</sub> = 0.5A	E <sub>r</sub>				5				mJ
Typical Thermal resistance junction to lead on aluminum substrate on glass-epoxy P.C.B.	R <sub>th(jl)</sub> R <sub>th(ja)</sub>				25 62.5 80				°C/W
Storage and Operating Junction Temperature Range	T <sub>stg</sub> , T <sub>j</sub>				-55 to +150				°C

Note:

RATINGS AND CHARACTERISTIC CURVES LLB005-47L THRU LLB10-47L

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

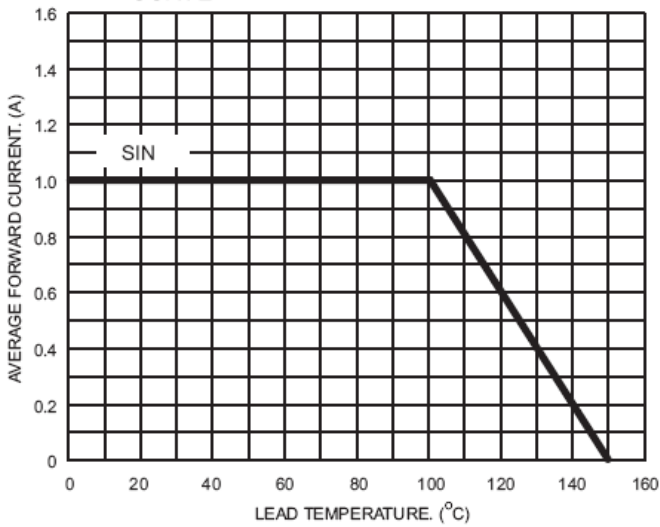


FIG.2- TYPICAL FORWARD CHARACTERISTICS

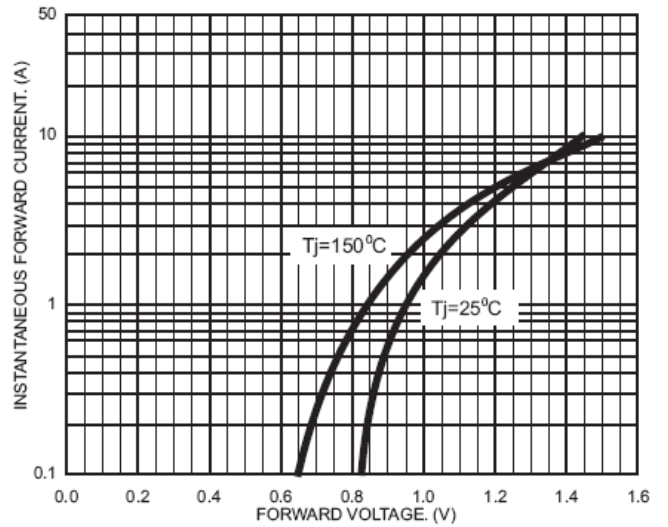


FIG.3- MAXIMUM FORWARD CURRENT DERATING CURVE

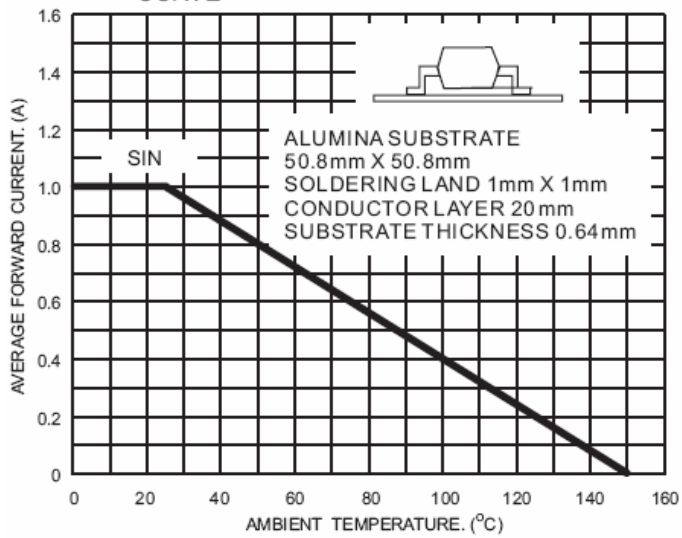


FIG.4- FORWARD POWER DISSIPATION

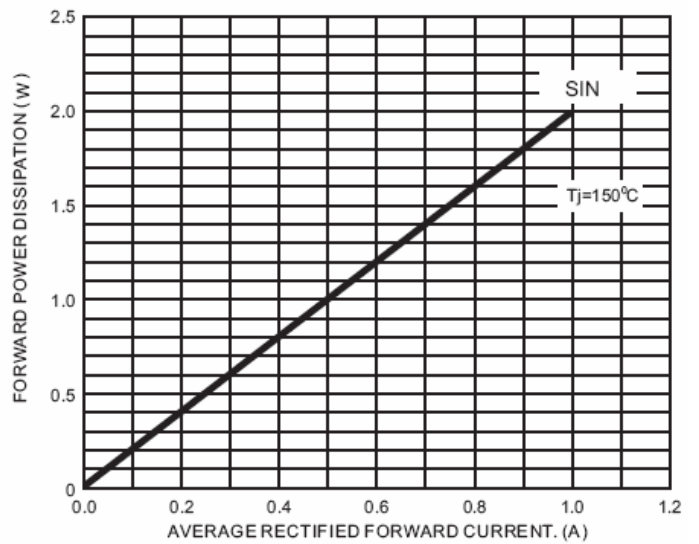


FIG.5- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

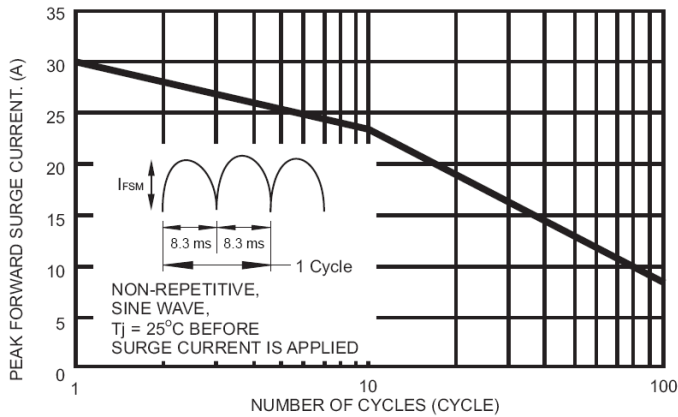
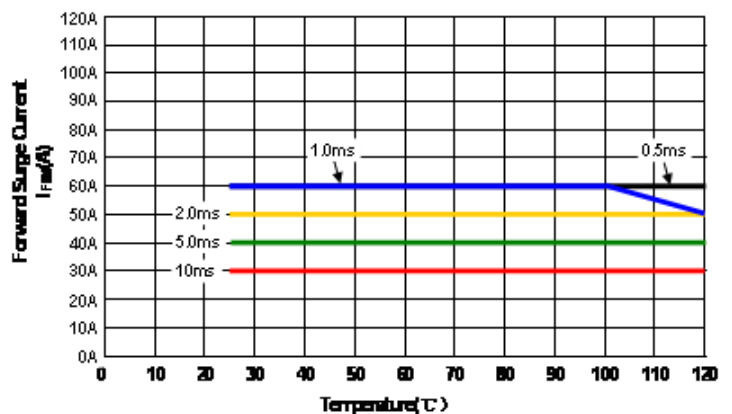


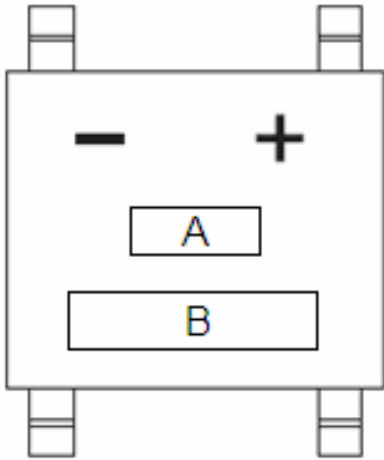
Fig. 6 — Maximum Non-Repetitive Peak Forward Surge Current (0.5ms ~ 10ms)



---

MARKING LLB005-E-47L THRU LLB10-E-47L

---



**A: LOGO**

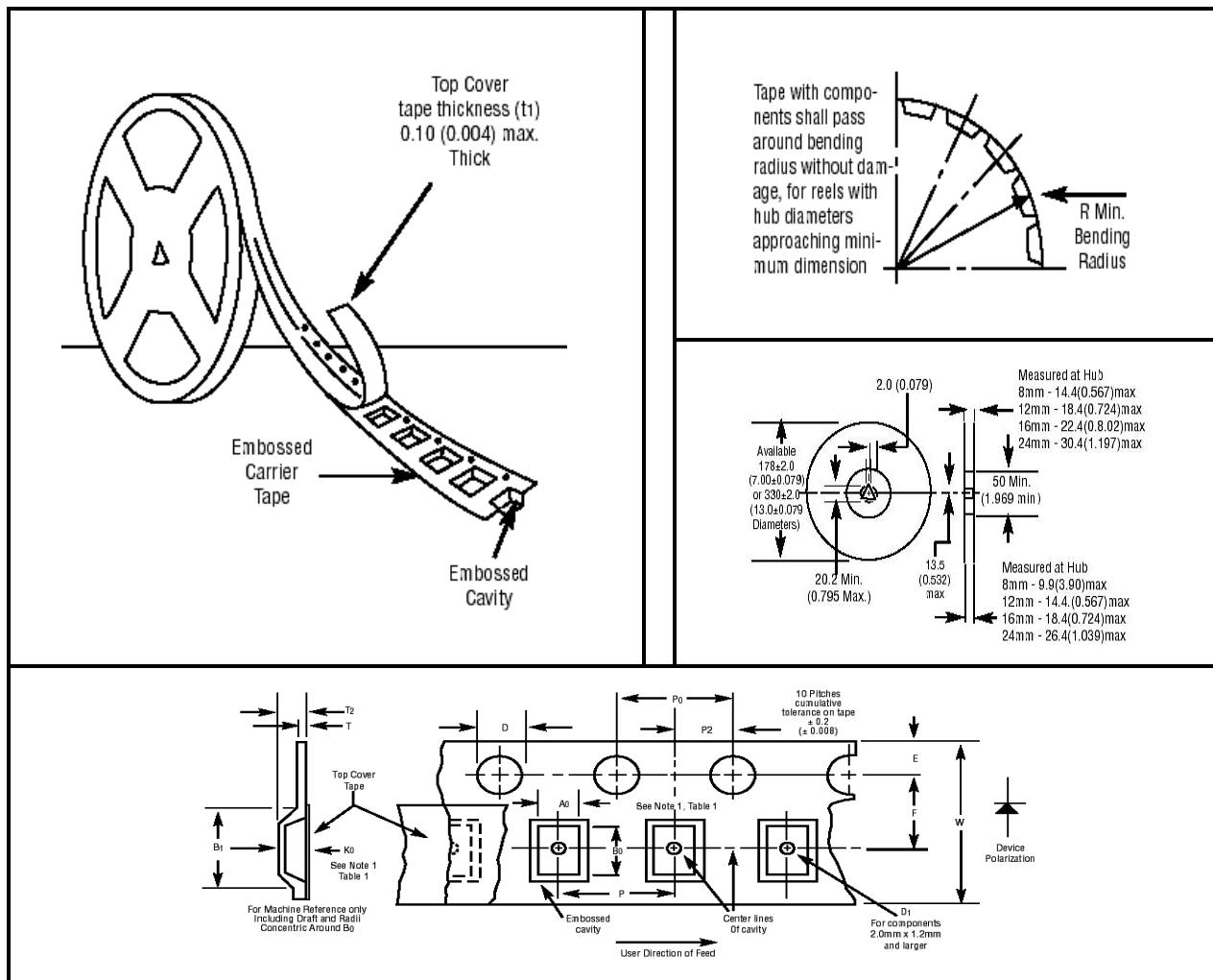


**E**

**B: TYPE NAME**

**LLB08**

PACKING SPEC LLB005-E-47L THRU LLB10-E-47L



	LBF (mm)
A <sub>0</sub> (TYP)	6.0
B <sub>0</sub> (TYP)	8.3
K <sub>0</sub> (TYP)	1.6
W	12±0.3
P <sub>0</sub>	4±0.1
P <sub>2</sub>	2±0.5
D	1.55±0.01
E	1.75±0.1
F	5.5±0.05
T (TYP)	0.6

**TYPE AND REEL PACKAGING:**

Component Case Type	Units Per Reel(pcs)	Component Spacing (mm)	Tape Spacing (mm)	Approx Gross Weight Per Reel Material(kg)	Approx Gross Weight Per Reel packed (kg)	Approx Gross Weight Per Box packed (kg)
LLB08-E	5000x2	4	12	0.272	0.922	2.004

Carton Size (cm)	Carton No.	Qty Per Carton (pcs)	Net Weight (kg)	Approx Gross Weight (kg)
35.5x35.5x34.5	05N	80K	15.8	16.8