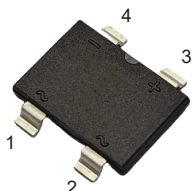


Low VF Bridge Rectifier

LBS Package



PINNING

PIN	DESCRIPTION
1	Input Pin (~)
2	Input Pin (~)
3	Output Anode (+)
4	Output Cathode (-)

Features

- Glass Passivated Chip Junction
- Reverse Voltage - 800 V
- Forward Current - 8.0 A
- High Surge Current Capability
- Designed For Surface Mount Application

Benefits

- Case: LBS
- Terminals: Matte tin plated leads, solderable per J-STD-002 and JESD22-B102;

Maximum Ratings and Electrical characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.

Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20 %.

Parameter		Symbols	LBS80KL		Units
Maximum Repetitive Peak Reverse Voltage		VRRM	800		V
Maximum RMS voltage		VRMS	560		V
Maximum DC Blocking Voltage		VDC	800		V
Average Rectified Output Current		Io	8.0		A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)		IFSM	220		A
I²t rating for fusing (1ms< t < 8.3 ms)		I²t	200		A²S
Instantaneous forward voltage per diode@25 °C		VF	TYP.	MAX.	V
	IF=2A		0.85	--	
	IF=4A		0.90	0.93	
Maximum DC Reverse Current @TA=25 °C at Rated DC Blocking Voltage @TA=125 °C		IR	5 100		µA
Typical Junction Capacitance (Note1)		Cj	50		pF
Operating and Storage Temperature Range		Tj, Tstg	-55 ~ +150		°C
Typical thermal resistance (Note 2)		RthJC	11		°C/W
		RthJA	70		
		RthJL	14		

Note: 1. Measured at 1MHz and applied reverse voltage of 5 VDC.

2. Mounted on glass epoxy PC board with 4×1.5"×1.5" (3.81×3.81 cm) copper pad

RATINGS AND CHARACTERISTICS CURVES (TA = 25 °C unless otherwise noted)

Fig.1 Current Derating, Case

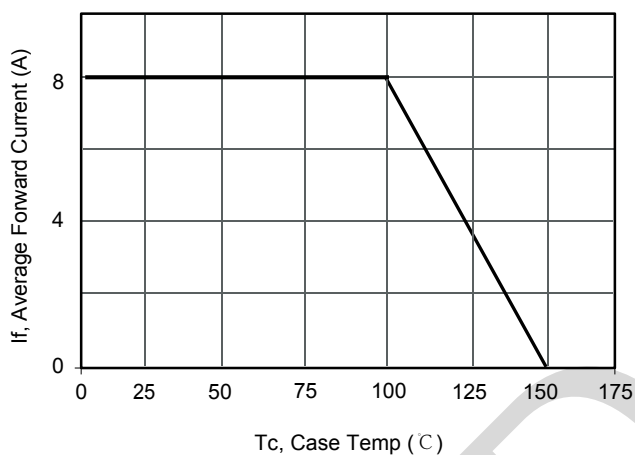


Fig.2 Maximum Non-Repetitive Peak Forward Surge Current

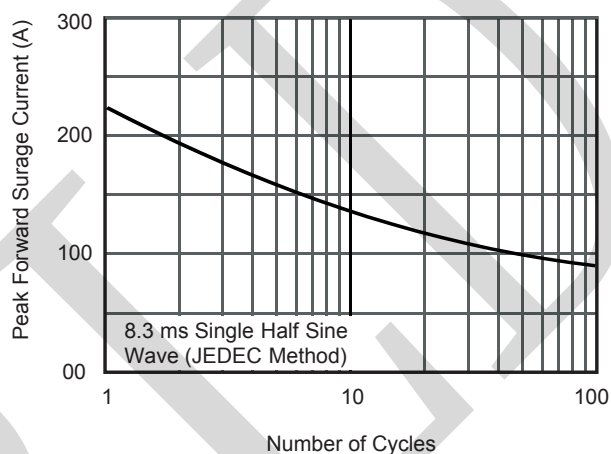


Fig.3 Typical Forward Voltage

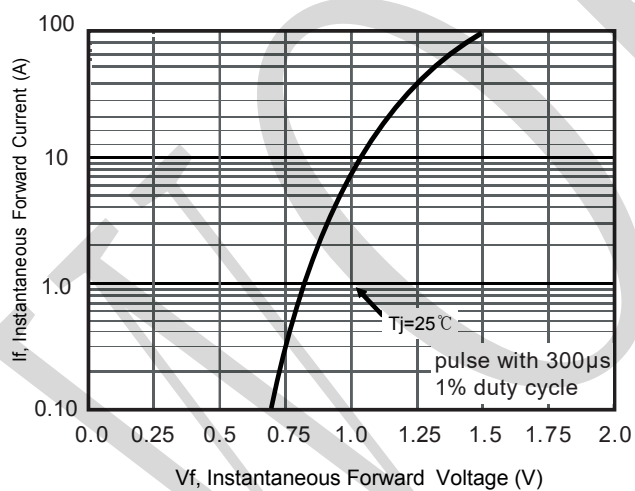
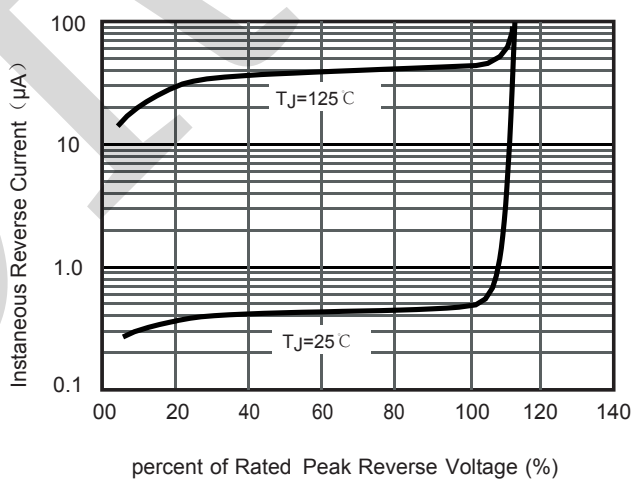
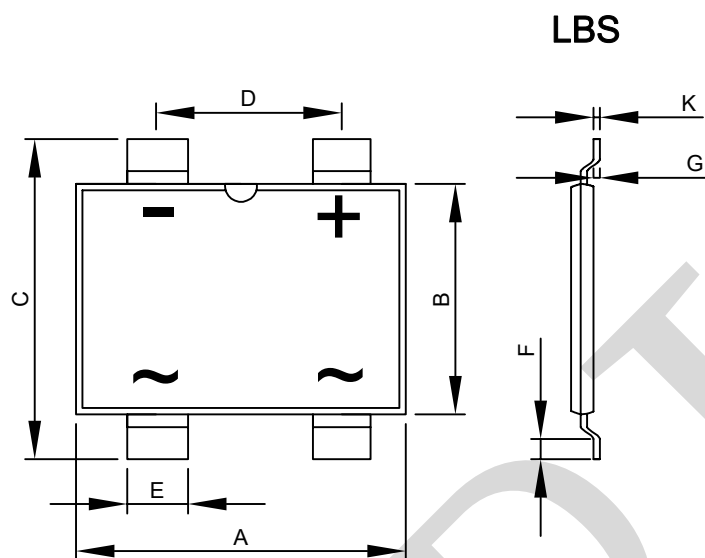


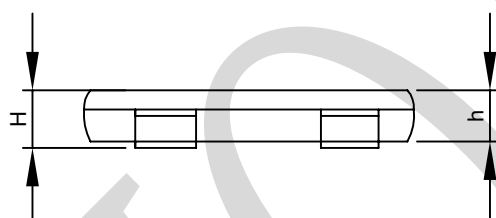
Fig.4 Typical Reverse Characteristics



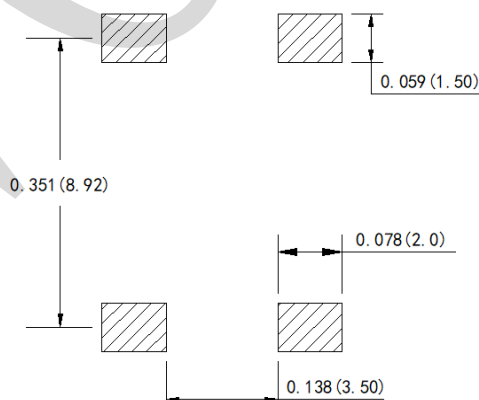
PACKAGE OUTLINE DIMENSIONS



LBS		
Dim	Min	Max
A	10.05	10.35
B	7.00	7.40
C	9.75	10.05
D	5.25	5.60
E	1.70	1.90
F	0.45	0.95
G	0.00	0.20
H	1.45	1.80
h	1.45	1.65
K	0.15	0.35

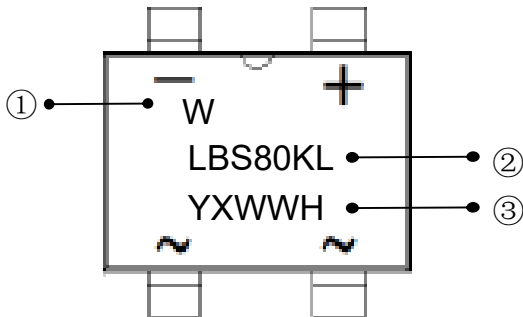


Suggested PCB printfoot layout



Unit: inches (mm)

Marking Information



①W : Company's trademark

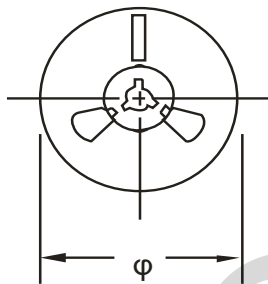
②Product model : LBS80KL

③PDC information :

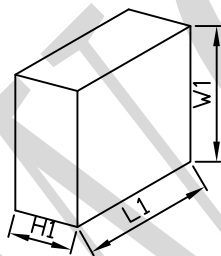
Y X WW H
 Y:Year code(ex:0=2020)
 X:Internal identification code
 WW:Week code(01 to 53)
 H:Halogen-free

Packaging Information

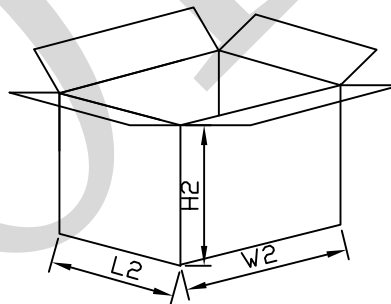
1.Reel Dimensions



2. Inside Box



3. Outside Box



Packaging Information

NO	UNIT	Reel Dimensions			Inside Box			Outside Box		
Size	mm	φ	A	B	L1	W1	H1	L2	W2	H2
		331	110	28	340	340	43	360	360	270
QTY	PCS	Smallest package,2,500PCS/reel			2,500PCS,1 reel in total			15,000PCS/carton,6boxes in total		
Note	Tolerance ≤20mm,±3mm; 21-100mm,±5mm; 101-500mm,±10mm									

Revision History

No	Revise Contents	Revise Date	Revision No
1	New formulation	23-Nov-2024	1.0
2			
3			
4			
5			
6			
7			