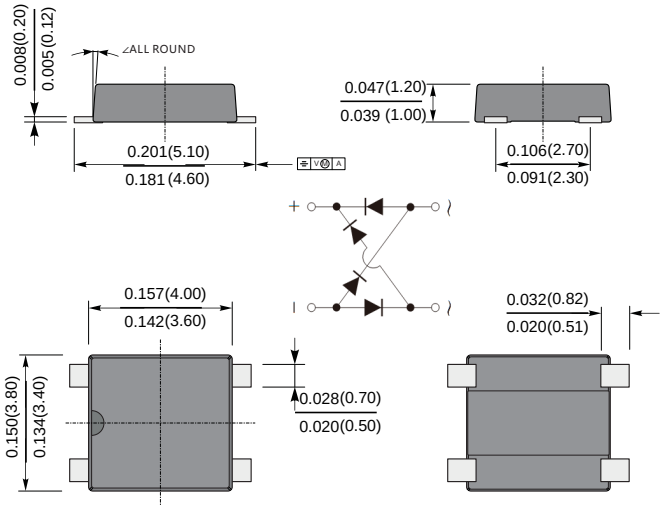
LBF1 THRU LBF10

SINGLE PHASE 1.0AMP SURFACE MOUNT GLASS PASSIVATED BRIDGE RECTIFIER

Features

- Glass passivated die construction
- Low forward voltage drop
- High current capability
- High surge current capability
- Designed for surface mount application
- Plastic material-UL flammability 94V-0

LBF



dimensions in inches and (millimeters)

Mechanical Data

- Case:LBF
- Terminals: Solderable per MIL-STD-750 Method 2026

Maximum Ratings and Electrical Characteristics

Rating at 25℃ ambient temperature unless otherwise specified.
Single Phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

TYPE NUMBER	SYMBOL	LBF1	LBF2	LBF4	LBF6	LBF8	LBF10	UNITS
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_{DC}	100	200	400	600	800	1000	V
RMS Reverse Voltage	V_{RMS}	70	140	280	420	560	700	V
Average Rectified Output Current (Note 1)@T_C=100℃	IF(AV)	1.0						A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	30						A
I^2t Rating for Fusing (t < 8.3ms)	I^2t	3.735						A^2s
Forward Voltage per element @IF=0.5A @IF=1.0A	V_{FM}	0.95 1.05						V
Peak Reverse Current @T_J =25℃ At Rated DC Blocking Voltage @T_J =125℃	I_R	5.0 50						uA
Typical Junction Capacitance per leg (Note2)	C_J	13						pF
Typical Thermal Resistance per leg (Note1)	$R_{\theta JA}$ $R_{\theta JC}$	110 25						℃/W
Operating and Storage Temperature Range	T_J,T_{STG}	-55to+150						℃

Note: 1. P.C.B mounted with 4x1.5 x1.5 (3.81x3.81 cm) copper pad areas.
2. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.

Fig. 1 Output Current Derating Curve

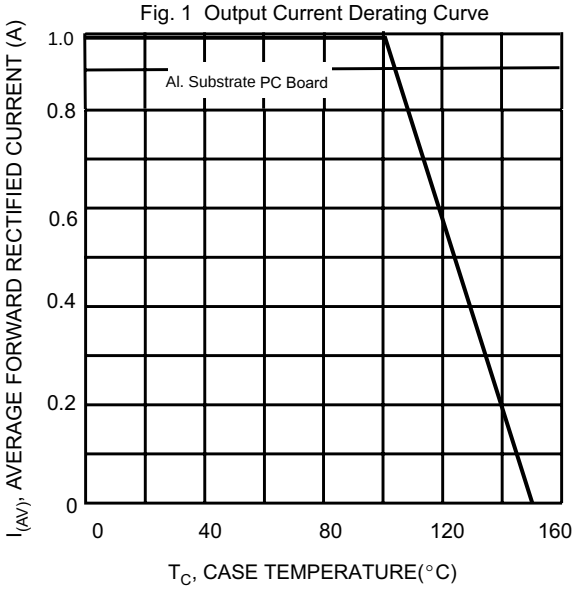


Fig. 2 Typical Forward Characteristics (per leg)

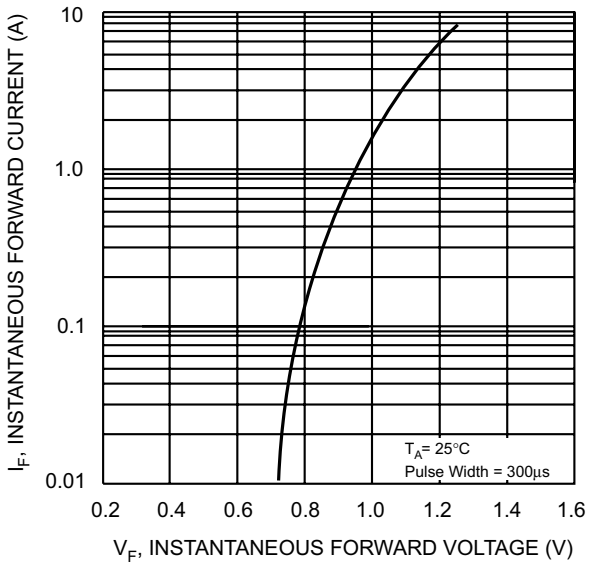


Fig. 3 Maximum Peak Forward Surge Current (per leg)

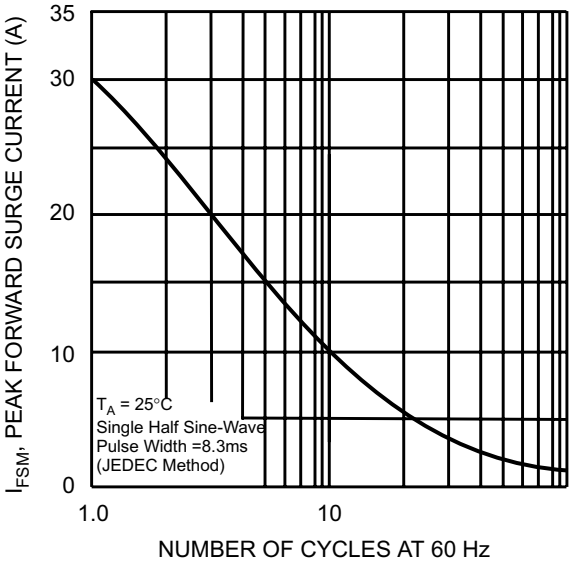


Fig. 4 Typical Junction Capacitance

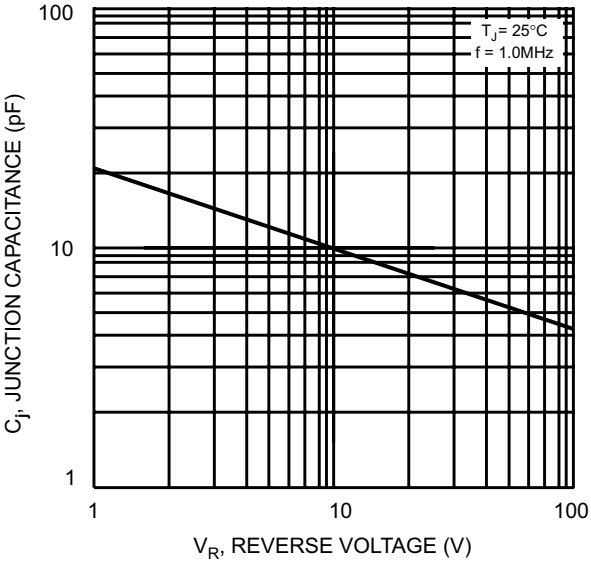


FIG.5 TYPICAL REVERSE CHARACTERISTICS

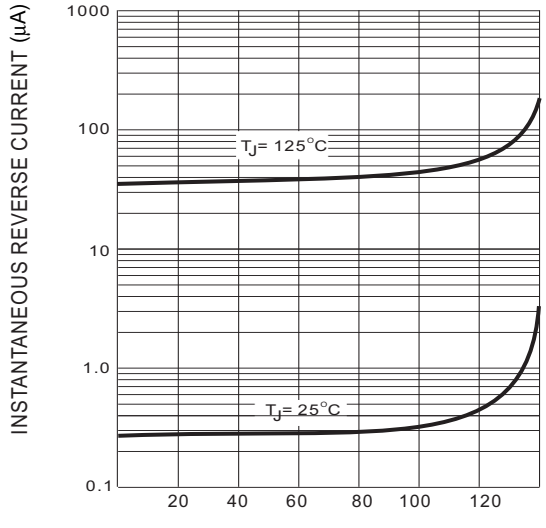
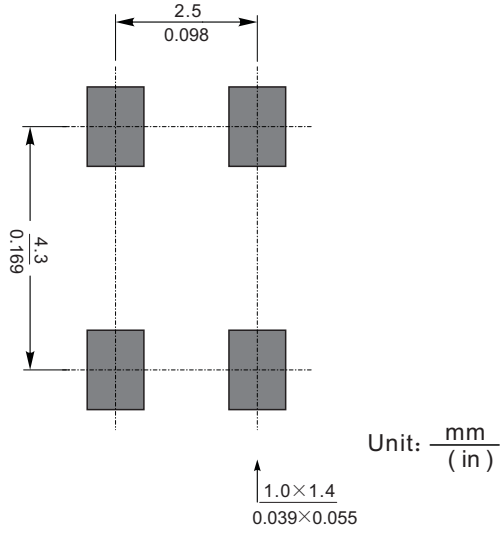


FIG.6 MOUNTING PAD LAYOUT



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