ULB10-E

SINGLE PHASE GLASS PASSIVATED
ULTRAFAST RECOVERY
SURFACE MOUNT FLAT BRIDGE RECTIFIER
VOLTAGE: 1000V CURRENT: 1.0A

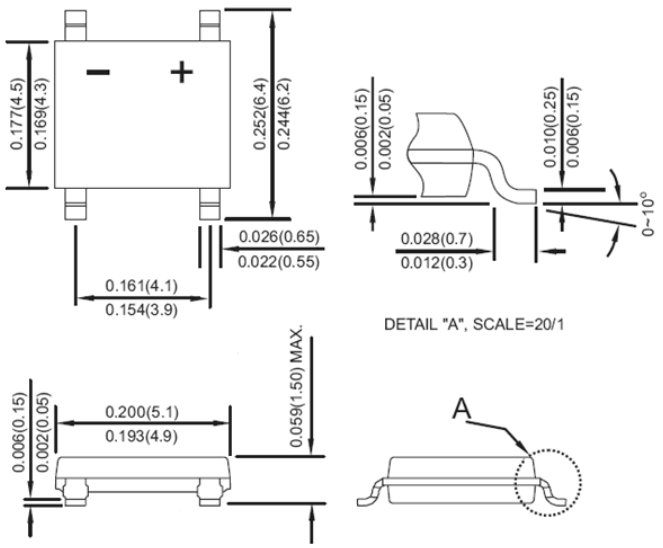
FEATURE

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
Halogen Free

MECHANICAL DATA

Terminal: Solder plated, solderable per J-STD-002
Case:UL-94 Class V-0 recognized Halogen Free 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	ULB10-E	Units
Maximum Recurrent Peak Reverse Voltage	Vrrm	1000	V
Maximum RMS Voltage	Vrms	700	V
Maximum DC blocking Voltage	V_{DC}	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
Maximum Instantaneous Forward Voltage at forward current 0.4A	Vf	1.5	V
Maximum DC Reverse Current Ta =25℃ at rated DC blocking voltage Ta =125℃	Ir	10.0 100.0	μA
Maximum Reverse Recovery Time (Note 1)	Trr	50	nS
Typical Thermal resistance (Note 2)	Rth(jc)	20	℃/W
Storage and Operating Junction Temperature Range	Tstg, Tj	-55 to +150	℃

Note:
1. Reverse Recovery Condition If =0.5A, Ir =1.0A, Irr =0.25A
2. Thermal Resistance from Junction to Case mounted on 5×5mm copper pad area

RATINGS AND CHARACTERISTIC CURVES ULB10-E

Fig. 1 — Forward Current Derating Curve

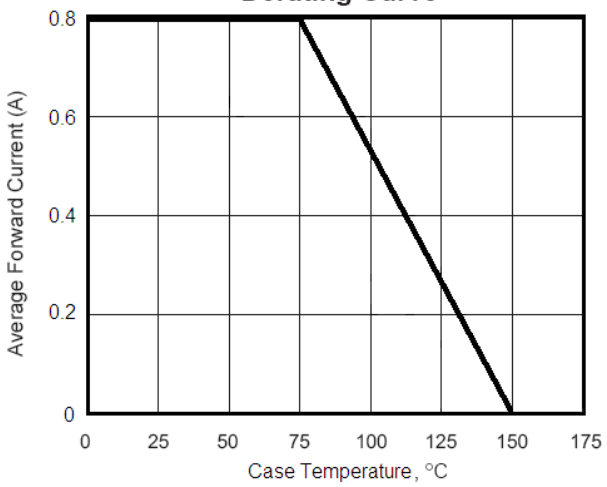


Fig. 2 — Maximum Non-Repetitive Peak Forward Surge Current

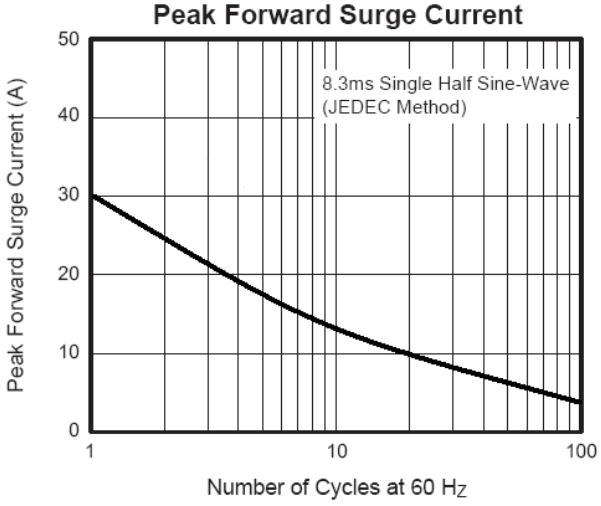


Fig. 3 — Typical Instantaneous Forward Characteristics

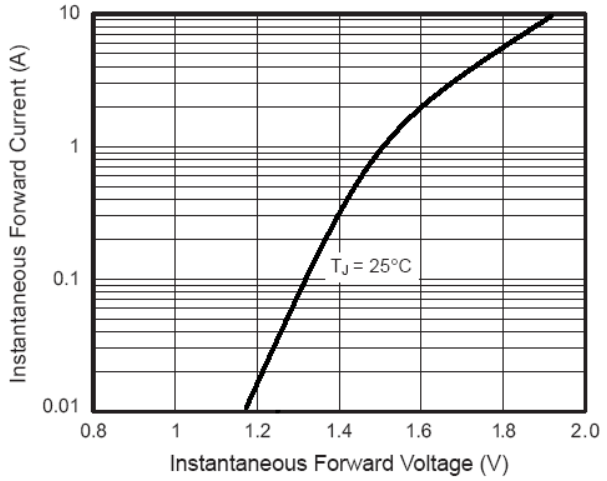


Fig. 4 — Typical Reverse Characteristics