



Surface Mount Super fast Recovery Bridge Rectifier

Reverse Voltage –100 to 600 V

Forward Current – 1 A

FEATURES

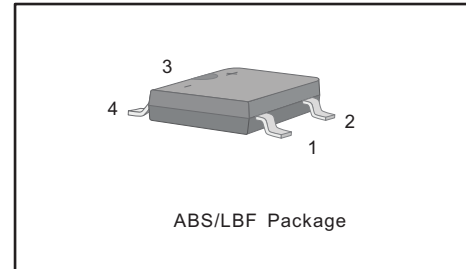
- For surface mounted applications
- Low profile package
- Glass Passivated Chip Junction
- Super fast reverse recovery time
- Lead free in comply with EU RoHS 2011/65/EU directives

MECHANICAL DATA

- Case: ABS/LBF
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 88mg/0.0031oz

PINNING

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



Absolute Maximum Ratings and Characteristics

Ratings at 25 °C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Parameter	Symbols	ETB1S-10	ETB2S-10	ETB4S-10	ETB6S-10	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	100	200	400	600	V
Maximum RMS voltage	V_{RMS}	70	140	280	420	V
Maximum DC Blocking Voltage	V_{DC}	100	200	400	600	V
Maximum Average Forward Rectified Current at $T_c = 125\text{ °C}$	$I_{F(AV)}$	1				A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load	I_{FSM}	30				A
Maximum Forward Voltage at 1 A	V_F	0.95		1.25	1.70	V
Maximum DC Reverse Current $T_a = 25\text{ °C}$ at Rated DC Blocking Voltage $T_a = 125\text{ °C}$	I_R	5 100				μA
Typical Junction Capacitance (Note: 1)	C_j	15				pF
Maximum Reverse Recovery Time (Note: 2)	t_{rr}	35				ns
Typical Thermal Resistance (Note: 3)	$R_{\theta JA}$	85				$^{\circ}C/W$
Operating and Storage Temperature Range	T_j, T_{stg}	-55 ~ +150				$^{\circ}C$

Note: 1. Measured at 1MHz and applied reverse voltage of 4 V D.C.
2. Measured with $I_f = 0.5\text{ A}$, $I_R = 1\text{ A}$, $I_{rr} = 0.25\text{ A}$.
3. Mounted on glass epoxy PC board with $4 \times 1.5 \times 1.5$ " (3.81×3.81 cm) copper pad.



Fig.1 Reverse Recovery Time Characteristic And Test Circuit Diagram

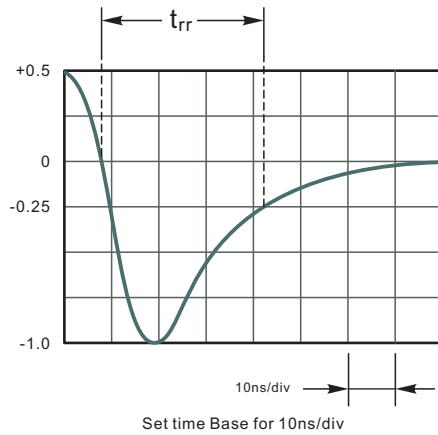
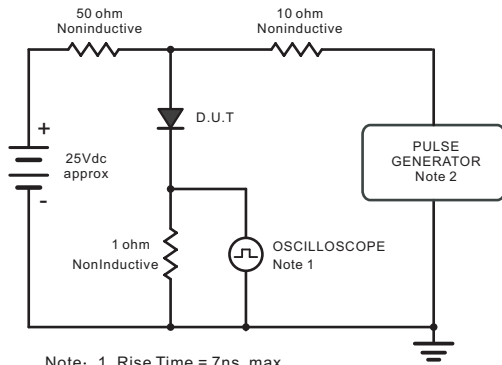


Fig.2 Maximum Average Forward Current Rating

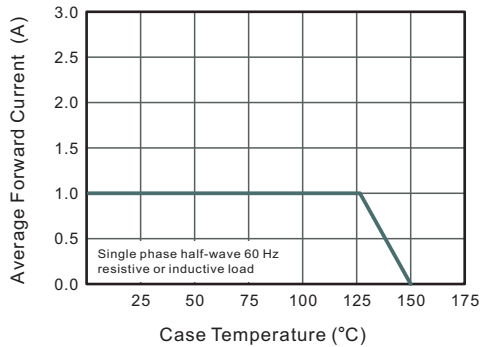


Fig.3 Typical Reverse Characteristics

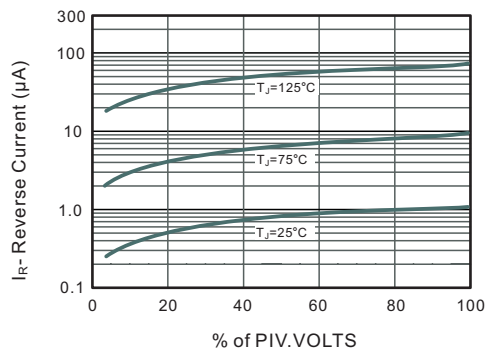


Fig.4 Typical Forward Characteristics

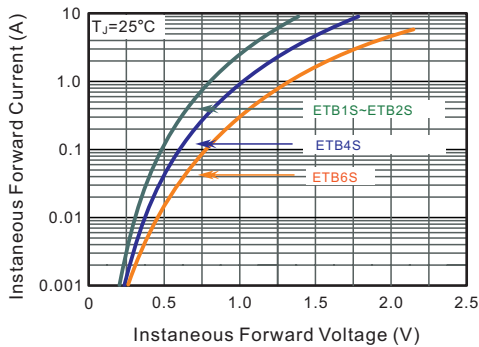


Fig.5 Typical Junction Capacitance

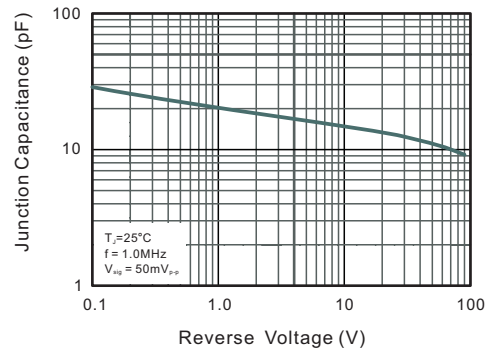
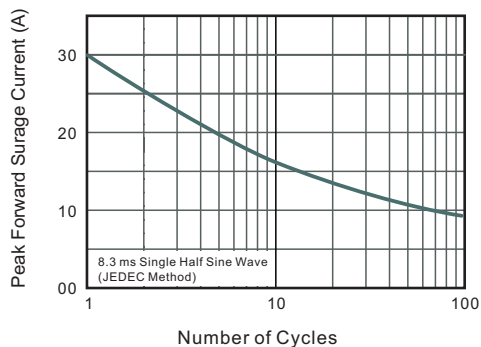


Fig.6 Maximum Non-Repetitive Peak Forward Surge Current

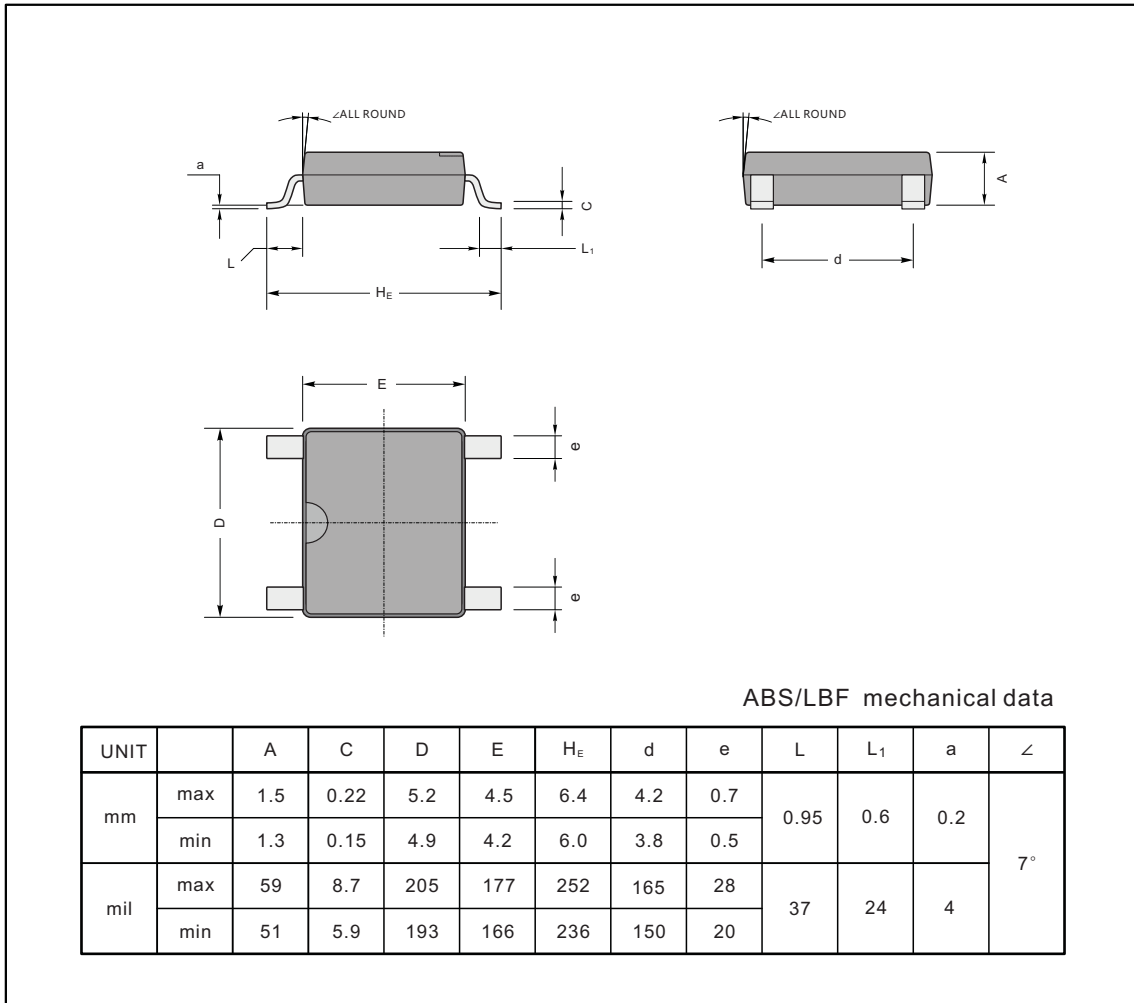




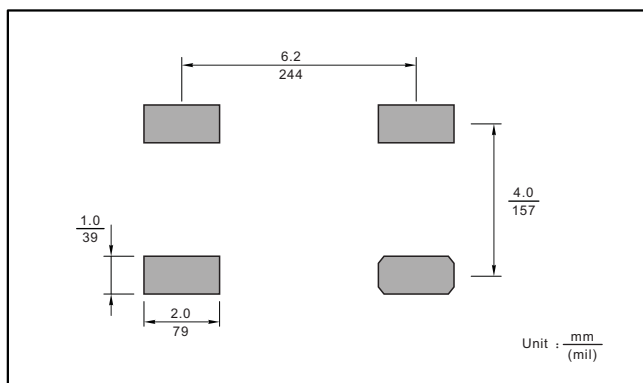
PACKAGE OUTLINE

Plastic surface mounted package; 4 leads

ABS/LBF



The recommended mounting pad size



Marking

Type number	Marking code
ETB1S-10	ETB1S
ETB2S-10	ETB2S
ETB4S-10	ETB4S
ETB6S-10	ETB6S