

ABS1-10AT THRU ABS10-10AT

SURFACE MOUNT GLASS PASSIVATED BRIDGE RECTIFIER

Reverse Voltage 100~1000 V

Forward Current 1.0A

FEATURES

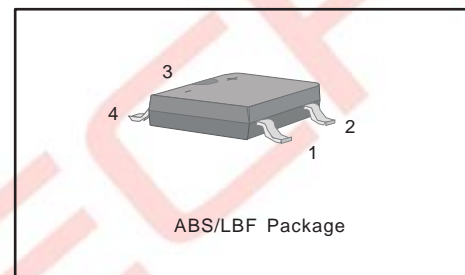
- ◆ Glass Passivated Chip Junction
- ◆ Reverse Voltage - 100 to 1000 V
- ◆ Forward Current - 1 A
- ◆ High Surge Current Capability
- ◆ Designed for Surface Mount Application

PINNING

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

MECHANICAL DATA

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



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	ABS1-10AT	ABS2-10AT	ABS4-10AT	ABS6-10AT	ABS8-10AT	ABS10-10AT	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	100	200	400	600	800	1000	V
Maximum RMS voltage	V_{RMS}	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	100	200	400	600	800	1000	V
Average Rectified Output Current at $T_c = 125\text{ }^\circ\text{C}$	I_o	1						A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	35						A
Forward Voltage per element @ $I_F = 1.0A$	V_F	1.1						V
Maximum DC Reverse Current at Rated DC Blocking Voltage @ $T_A = 25\text{ }^\circ\text{C}$ @ $T_A = 100\text{ }^\circ\text{C}$ @ $T_A = 125\text{ }^\circ\text{C}$	I_R	5 50 100						μA
Typical Junction Capacitance (Note1)	C_j	13						pF
Typical Thermal Resistance (Note2)	$R_{\theta JA}$ $R_{\theta JC}$	72 20						$^\circ\text{C/W}$
Operating and Storage Temperature Range	T_j, T_{stg}	-55 ~ +150						$^\circ\text{C}$

Note: 1. Measured at 1MHz and applied reverse voltage of 4 V D.C.

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

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RATINGS AND CHARACTERISTIC CURVES

Fig.1 Average Rectified Output Current Derating Curve

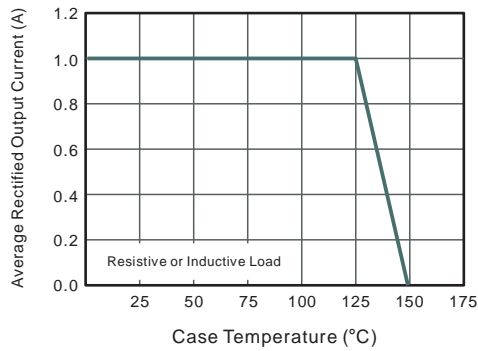


Fig.2 Typical Reverse Characteristics

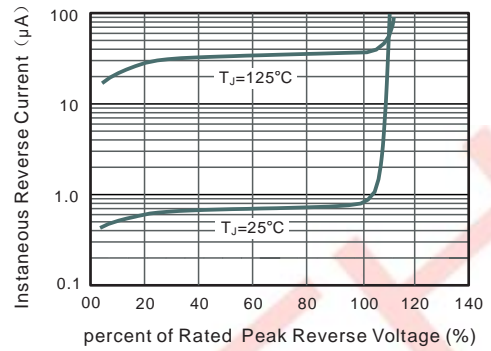


Fig.3 Typical Instantaneous Forward Characteristics

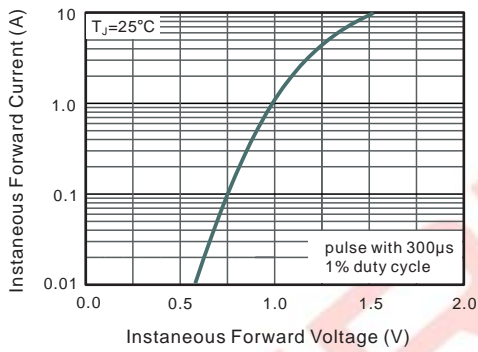


Fig.4 Typical Junction Capacitance

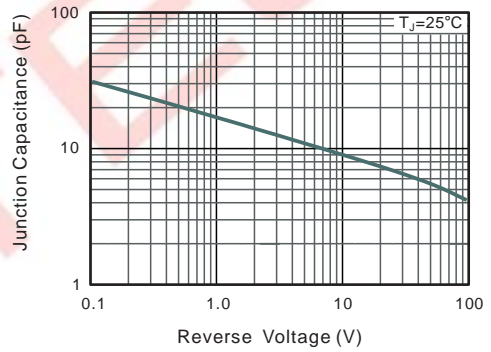
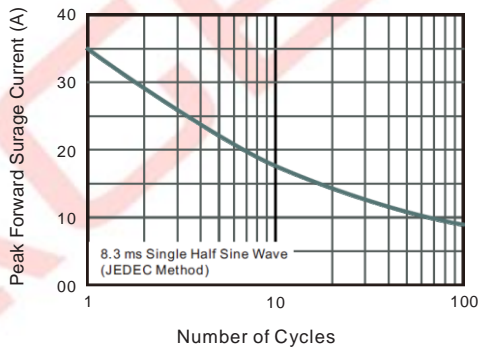


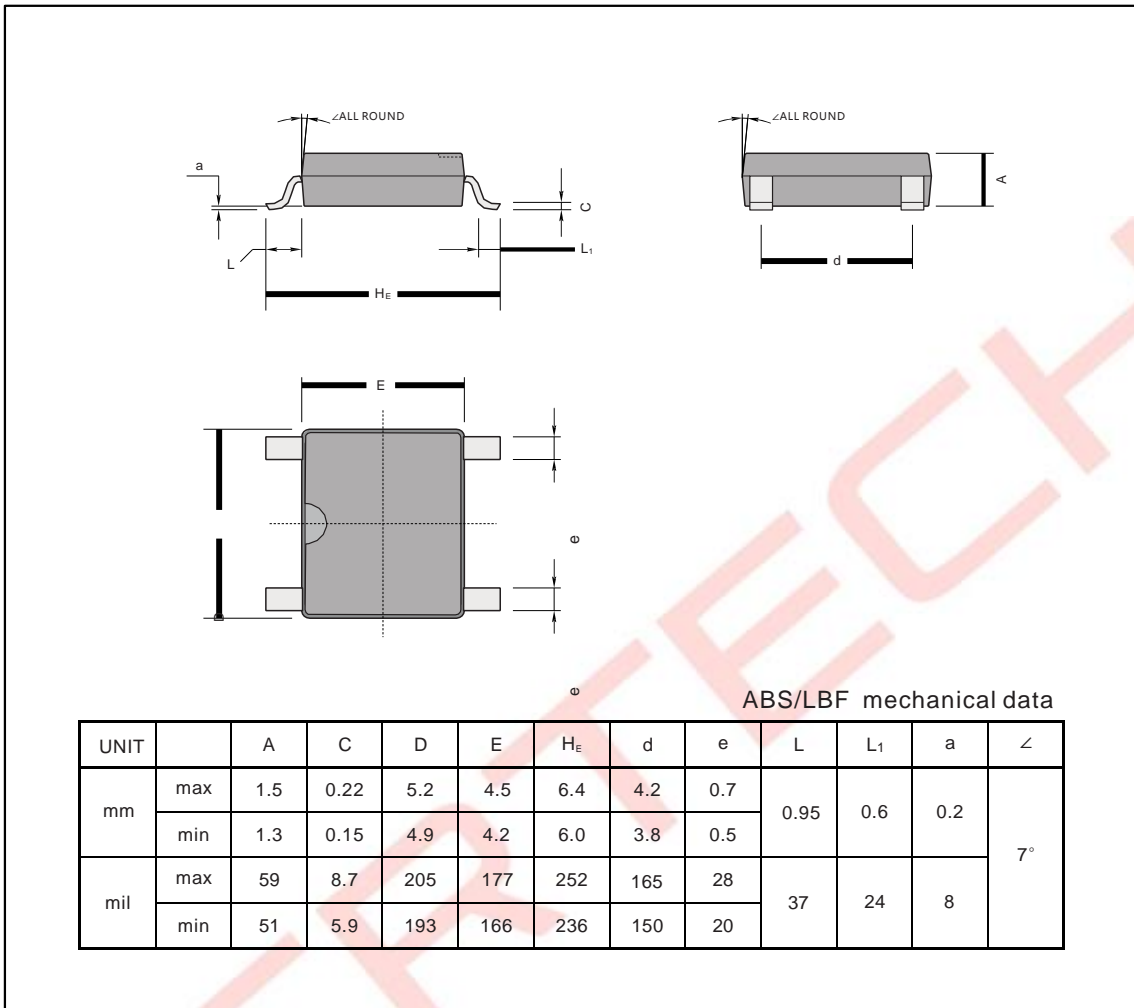
Fig.5 Maximum Non-Repetitive Peak Forward Surge Current



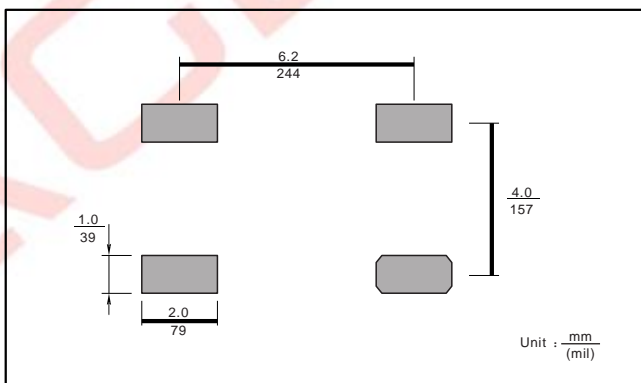
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PACKAGE OUTLINE

ABS/LBF



The recommended mounting pad size



Marking

Type number	Marking code
ABS1-10AT	10T1
ABS2-10AT	10T2
ABS4-10AT	10T4
ABS6-10AT	10T6
ABS8-10AT	10T8
ABS10-10AT	10T10

