

1A SURFACE MOUNT SCHOTTKY BRIDGE

FEATURES:

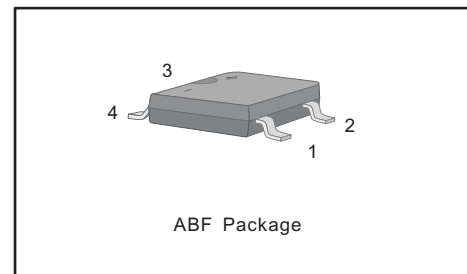
- Reverse Voltage - 40 to 200 V
- Forward Current - 1.0 A
- High Surge Current Capability
- Designed for Surface Mount Application

MECHANICAL DATA

- Case: ABF
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 82mg 0.0029oz

PINNING

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



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	TB14F	TB16F	TB18F	TB110F	TB120F	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	40	60	80	100	200	V
Maximum RMS voltage	V_{RMS}	28	42	56	70	140	V
Maximum DC Blocking Voltage	V_{DC}	40	60	80	100	200	V
Average Rectified Output Current at $T_c = 100\text{ }^\circ\text{C}$	I_O	1.0					A
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	40		30			A
Max Instantaneous Forward Voltage at 1 A	V_F	0.55	0.70	0.85			V
Maximum DC Reverse Current $T_a = 25^\circ\text{C}$ at Rated DC Reverse Voltage $T_a = 100^\circ\text{C}$	I_R	0.3 10		0.2 5		0.1 2	mA
Typical Junction Capacitance (Note:1)	C_j	110	80				pF
Typical Thermal Resistance (Note: 2)	$R_{\theta JA}$	95					$^\circ\text{C/W}$
Operating Junction Temperature Range	T_j	-55 ~ +150					$^\circ\text{C}$
Storage Temperature Range	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.



Fig.1 Average Rectified Output Current Derating Curve

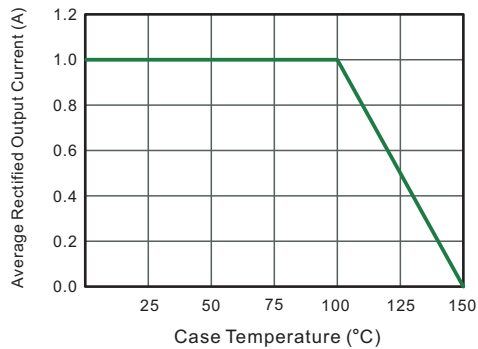


Fig.2 Typical Reverse Characteristics

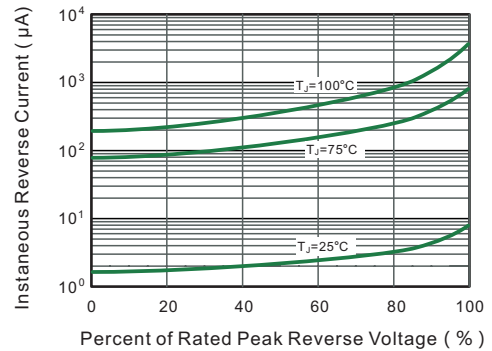


Fig.3 Typical Forward Characteristic

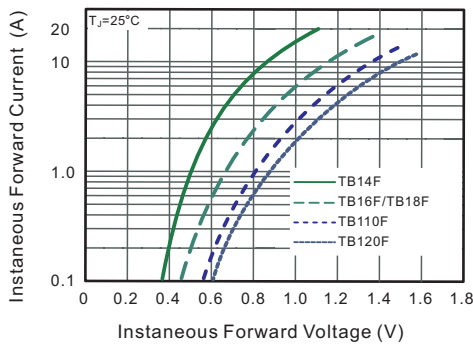


Fig.4 Typical Junction Capacitance

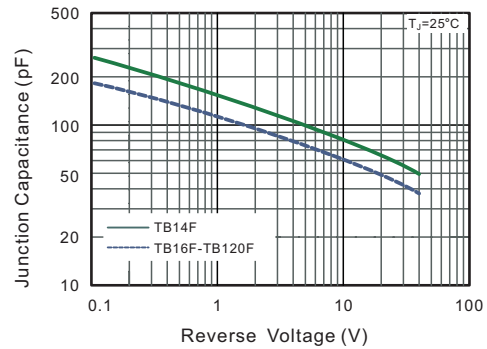


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

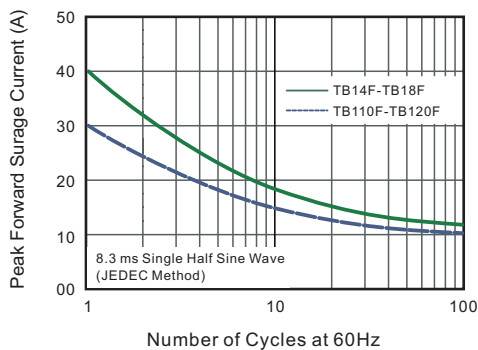
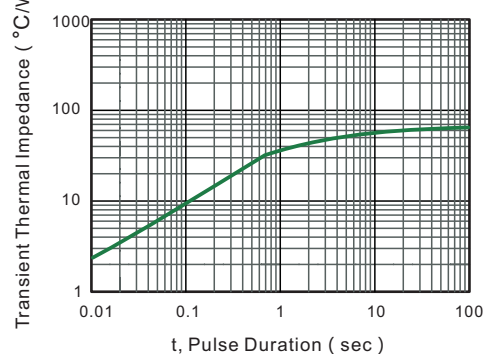


Fig.6- Typical Transient Thermal Impedance

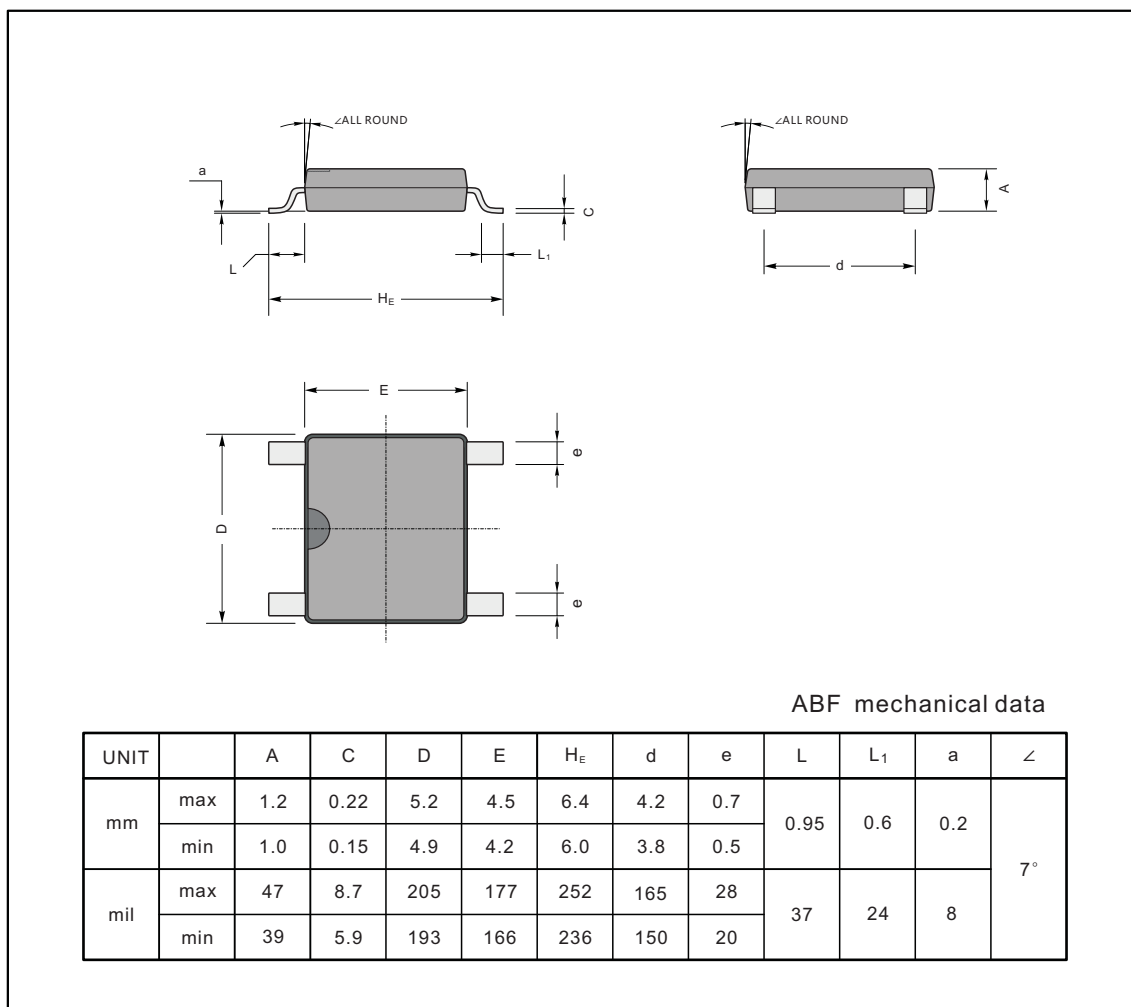




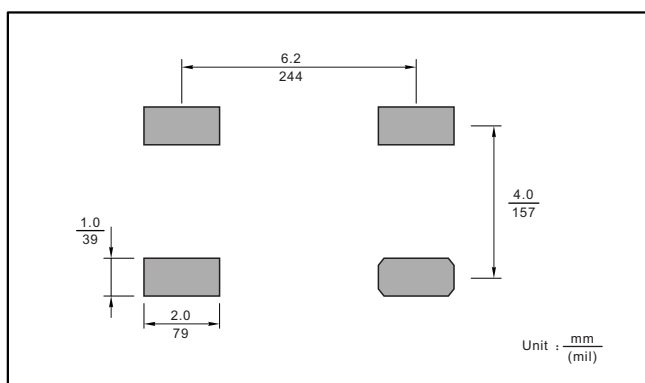
PACKAGE OUTLINE

Plastic surface mounted package; 4 leads

ABF



The recommended mounting pad size



Marking

Type number	Marking code
TB14F	TB14F
TB16F	TB16F
TB18F	TB18F
TB110F	TB110F
TB120F	TB120F