

TB14FAT THRU TB120FAT

SURFACE MOUNT SCHOTTKY BRIDGE RECTIFIERS

Forward Current-1A

Reverse Voltage-40V to 200V

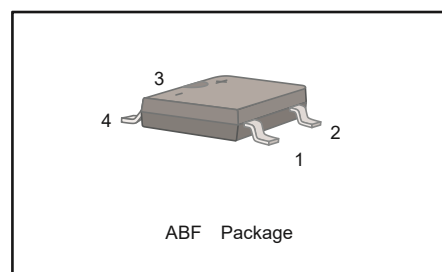
FEATURES

- ◆ For surface mount applications
- ◆ Glass passivated chip junction
- ◆ High surge current capability

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

MECHANICAL DATA

- ◆ Case: ABF molded plastic body
- ◆ Terminals: Solderable per MIL-STD-750 , Method 2026
- ◆ Weight: Approximated 0.082 grams



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 derating by 20 %.

PARAMETER	SYMBOL	TB14FAT	TB16FAT	TB18FAT	TB110FAT	TB120FAT	UNIT
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
Maximum Average Forward Rectified Current at $T_C=100^{\circ}C$	$I_{F(AV)}$	1					A
Peak Forward Surge Current (Note1)	I_{FSM}	40		30			A
Maximum Forward Voltage at 1A	V_F	0.55	0.7	0.85			V
Maximum DC Reverse Current at Rated DC Blocking Voltage at $T_A=25^{\circ}C$ $T_A=100^{\circ}C$	I_R	0.3 10		0.2 5		0.1 2	mA
Typical Junction Capacitance (Note2)	C_J	110	80			pF	
Typical Thermal Resistance (Note3)	$R_{\theta JA}$	95					$^{\circ}C/W$
Operating Temperature Range	T_J	-55 to +125					$^{\circ}C$
Storage Temperature Range	T_{STG}	-55 to +150					$^{\circ}C$

Notes : 1. Measured at 8.3 ms single half sine wave superimposed on rated load (JEDEC Method).

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

3. Mounted on 1.5" X 1.5" (3.81 X 3.81 cm) copper pad areas.

Dated: 11/2016
Rev:1.0

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RATINGS AND CHARACTERISTIC CURVES

Fig.1 Average Rectified Output Current Derating Curve

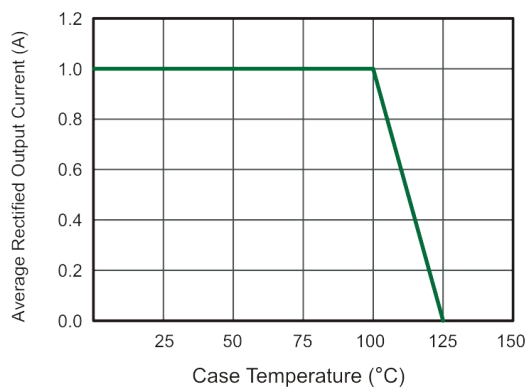


Fig.2 Typical Reverse Characteristics

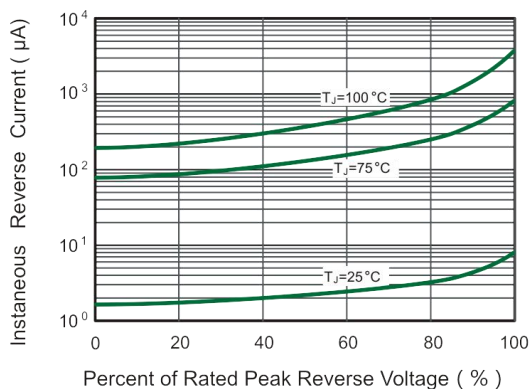


Fig.3 Typical Forward Characteristic

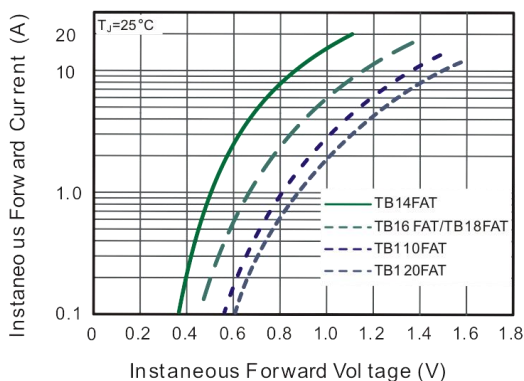


Fig.4 Typical Junction Capacitance

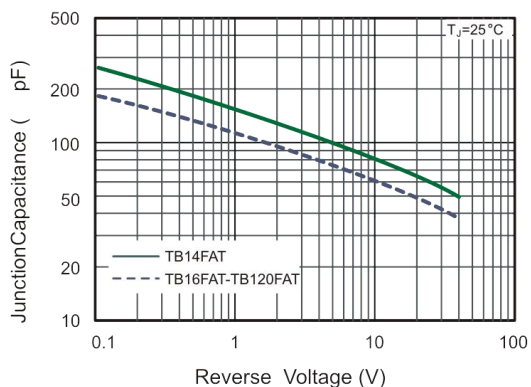


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

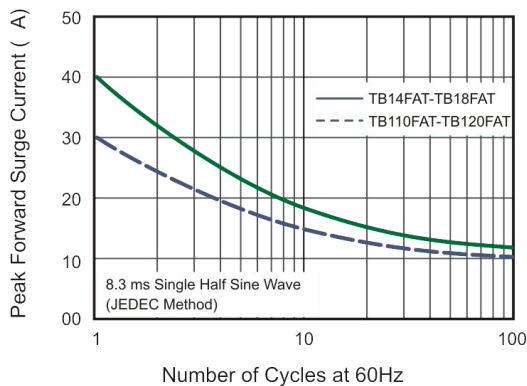
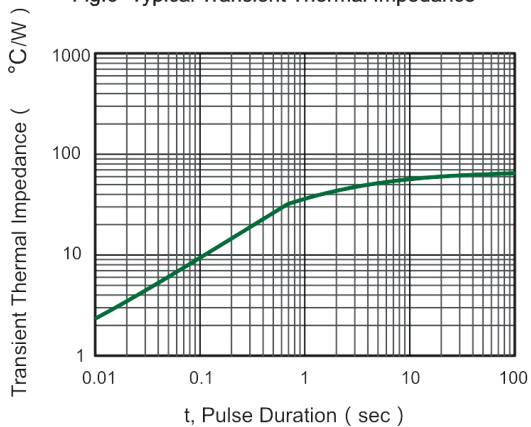


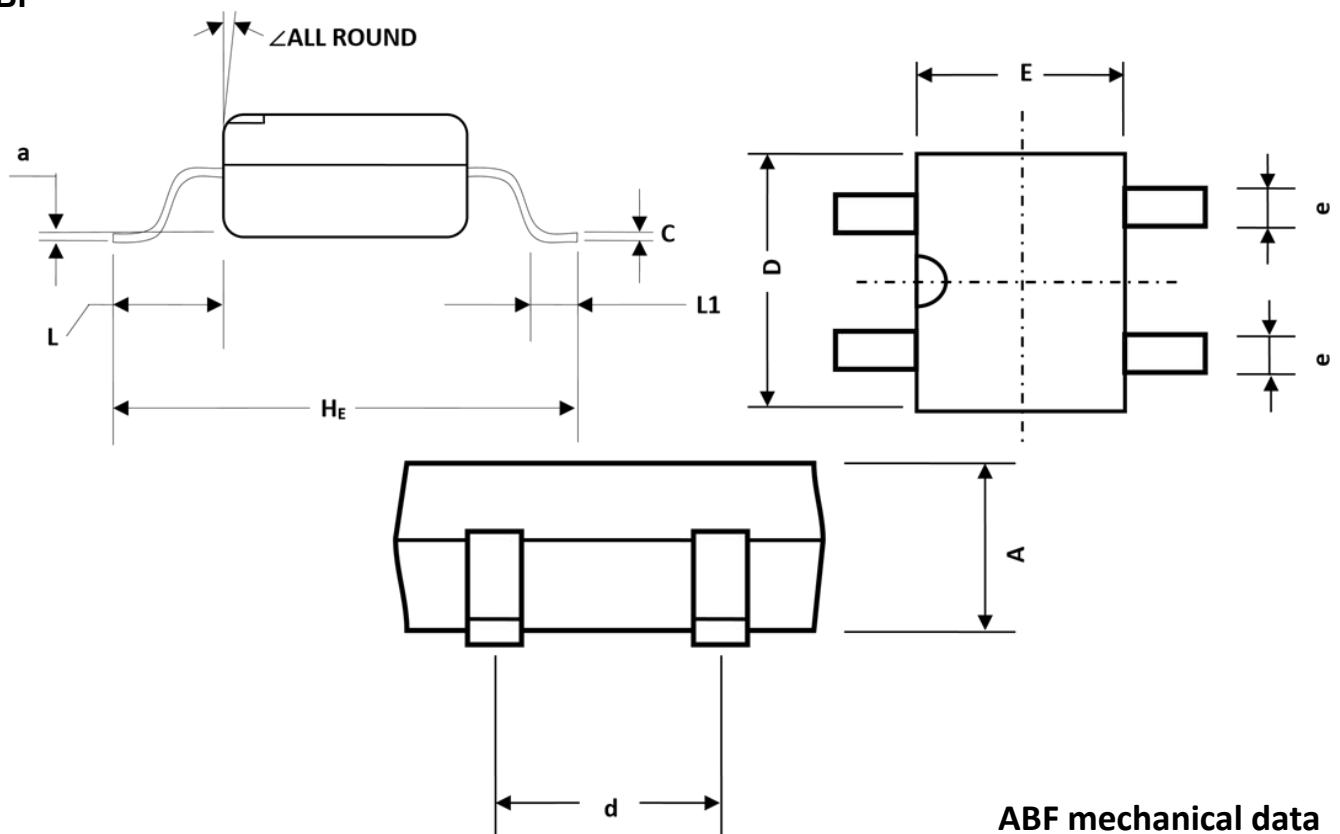
Fig.6- Typical Transient Thermal Impedance



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PACKAGE OUTLINE

ABF



ABF mechanical data

UNIT		A	C	D	E	H_E	d	e	L	L_1	a	\angle
mm	max	1.2	0.22	5.2	4.5	6.4	4.2	0.7	0.95	0.6	0.2	7°
	min	1.0	0.15	4.9	4.2	6.0	3.8	0.5				
mil	max	47	8.7	205	177	252	165	28	37	24	8	
	min	39	5.9	193	166	236	150	20				

ORDERING INFORMATION

Device	Package	Shipping
TB14FAT thru TB120FAT	ABF	3,000/Tape & Reel (11 inches)
		5,000/Tape & Reel (13 inches)