



## 2A SURFACE MOUNT SCHOTTKY BRIDGE

### FEATURES:

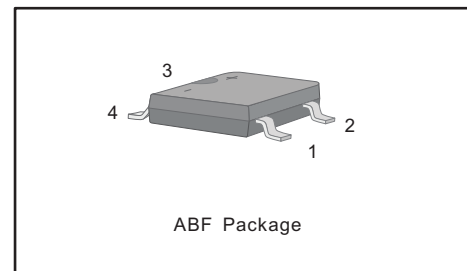
Reverse Voltage - 40 to 200 V  
Forward Current - 2 A  
High Surge Current Capability  
Designed for Surface Mount Application

### 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            | TB24F      | TB26F | TB28F | TB210F   | TB220F | Units |
|-----------------------------------------------------------------------------------------------------------|--------------------|------------|-------|-------|----------|--------|-------|
| Maximum Repetitive Peak Reverse Voltage                                                                   | V <sub>RRM</sub>   | 40         | 60    | 80    | 100      | 200    | V     |
| Maximum RMS voltage                                                                                       | V <sub>RMS</sub>   | 28         | 42    | 56    | 70       | 140    | V     |
| Maximum DC Blocking Voltage                                                                               | V <sub>DC</sub>    | 40         | 60    | 80    | 100      | 200    | V     |
| Average Rectified Output Current<br>at T <sub>c</sub> = 100 °C                                            | I <sub>F(AV)</sub> | 2.0        |       |       |          |        | A     |
| Peak Forward Surge Current,8.3ms<br>Single Half Sine-wave Superimposed<br>on Rated Load (JEDEC method)    | I <sub>FSM</sub>   | 50         |       | 40    |          |        | A     |
| Max Instantaneous Forward Voltage at 2A                                                                   | V <sub>F</sub>     | 0.55       | 0.70  | 0.85  |          |        | V     |
| Maximum DC Reverse Current   T <sub>a</sub> = 25°C<br>at Rated DC Reverse Voltage   T <sub>a</sub> =100°C | I <sub>R</sub>     | 0.5<br>10  |       |       | 0.3<br>5 |        | mA    |
| Typical Junction Capacitance (Note:1)                                                                     | C <sub>j</sub>     | 220        | 80    |       |          |        | pF    |
| Typical Thermal Resistance (Note:2)                                                                       | R <sub>θJA</sub>   | 70         |       |       |          |        | °C/W  |
| Operating Junction Temperature Range                                                                      | T <sub>j</sub>     | -55 ~ +125 |       |       |          |        | °C    |
| Storage Temperature Range                                                                                 | T <sub>stg</sub>   | -55 ~ +150 |       |       |          |        | °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

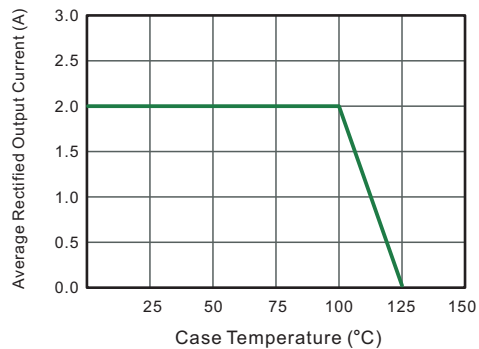


Fig.2 Typical Reverse Characteristics

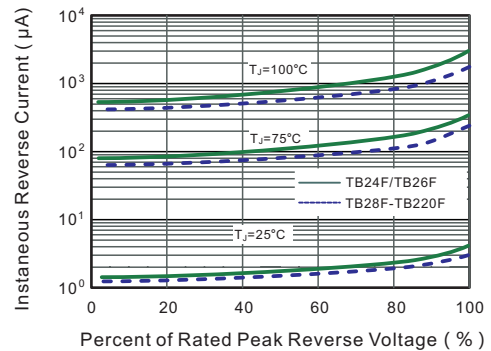


Fig.3 Typical Forward Characteristic

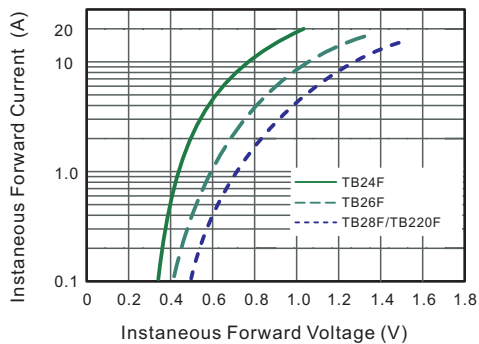


Fig.4 Typical Junction Capacitance

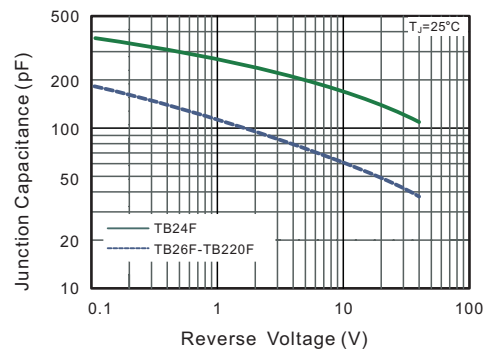
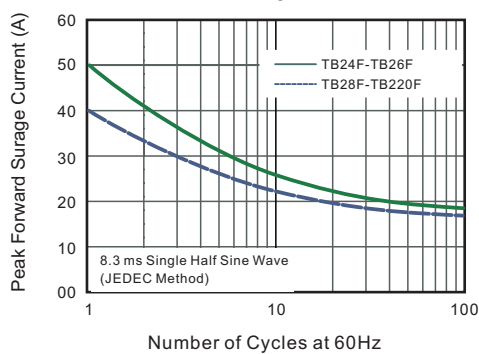


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

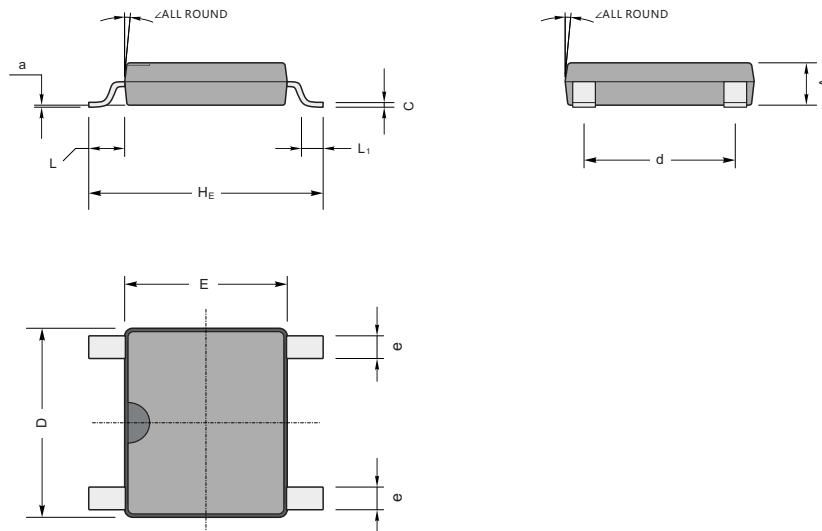




## PACKAGE OUTLINE

Plastic surface mounted package; 4 leads

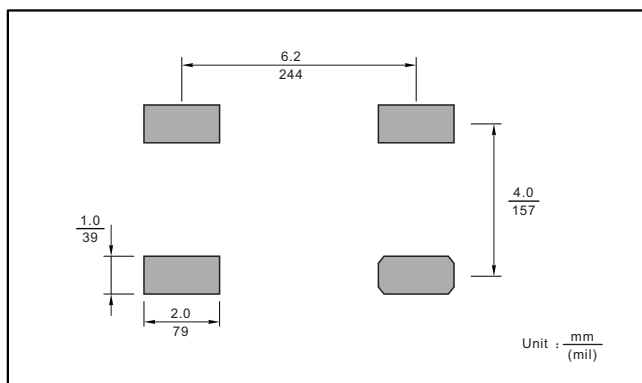
ABF



ABF mechanical data

| UNIT |     | A   | C    | D   | E   | H <sub>E</sub> | d   | e   | L    | L <sub>1</sub> | a   | ∠  |
|------|-----|-----|------|-----|-----|----------------|-----|-----|------|----------------|-----|----|
| 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  |      |                |     |    |

## The recommended mounting pad size



## Marking

| Type number | Marking code |
|-------------|--------------|
| TB24F       | TB24F        |
| TB26F       | TB26F        |
| TB28F       | TB28F        |
| TB210F      | TB210F       |
| TB220F      | TB220F       |

