

## 2A SURFACE MOUNT SCHOTTKY BRIDGE

### FEATURES:

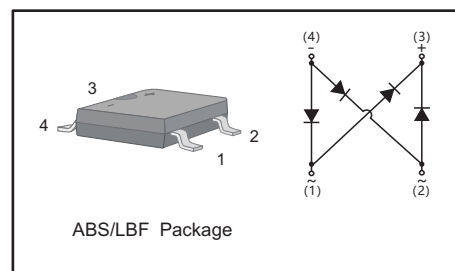
- Reverse Voltage - 100 V
- Forward Current - 2 A
- High Surge Current Capability
- Designed for Surface Mount Application

### 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 (-)



### 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	TB210SMG	Units
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	100	V
Maximum RMS voltage	$V_{RMS}$	70	V
Maximum DC Blocking Voltage	$V_{DC}$	100	V
Maximum Average Forward Rectified Current @ Fig.1	$I_{F(AV)}$	2.0	A
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	$I_{FSM}$	50	A
Peak Forward Surge Current, 1.0ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	$I_{FSM}$	100	A
$I^2t$ Rating for fusing ( $3ms \leq t \leq 8.3ms$ )	$I^2t$	10.3	A <sup>2</sup> S
Max Instantaneous Forward Voltage at 2 A	$V_F$	0.85	V
Maximum DC Reverse Current at Rated DC Reverse Voltage $T_a = 25^\circ C$ $T_a = 100^\circ C$	$I_R$	0.1 5	mA
Typical Junction Capacitance <sup>(1)</sup>	$C_j$	73	pF
Typical Thermal Resistance <sup>(2)</sup>	$R_{\theta JA}$ $R_{\theta JC}$ $R_{\theta JL}$	40 8 20	°C/W
Operating Junction Temperature Range	$T_j$	-55 ~ +150	°C
Storage Temperature Range	$T_{stg}$	-55 ~ +150	°C

(1) Measured at 1 MHz 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 Forward Current Derating Curve

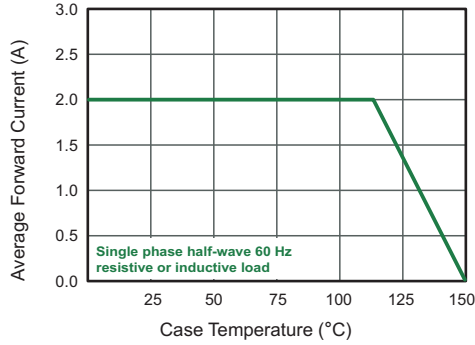


Fig.2 Typical Reverse Characteristics

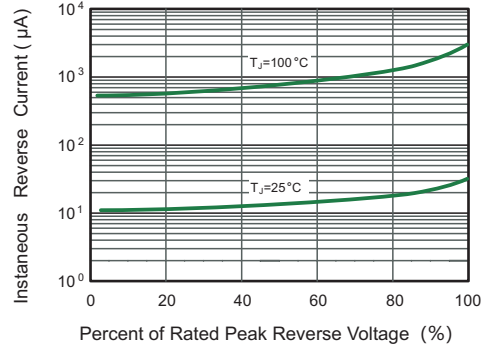


Fig.3 Typical Forward Characteristic

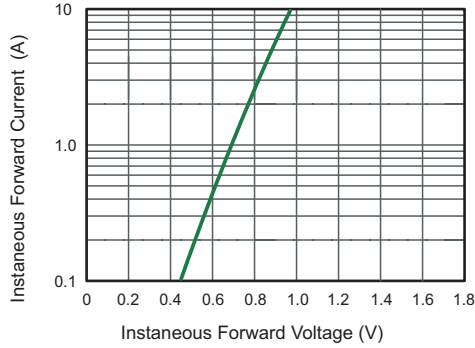


Fig.4 Typical Junction Capacitance

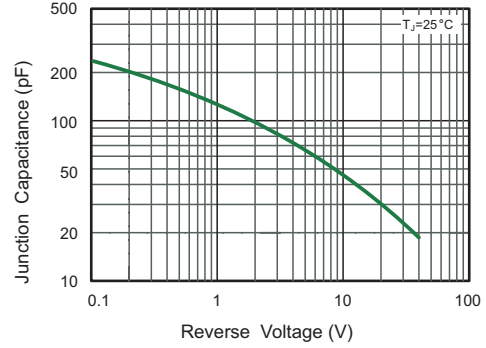
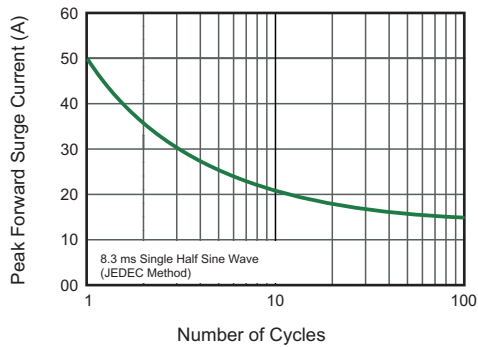


Fig.6 Maximum Non-Repetitive Peak Forward Surge Current

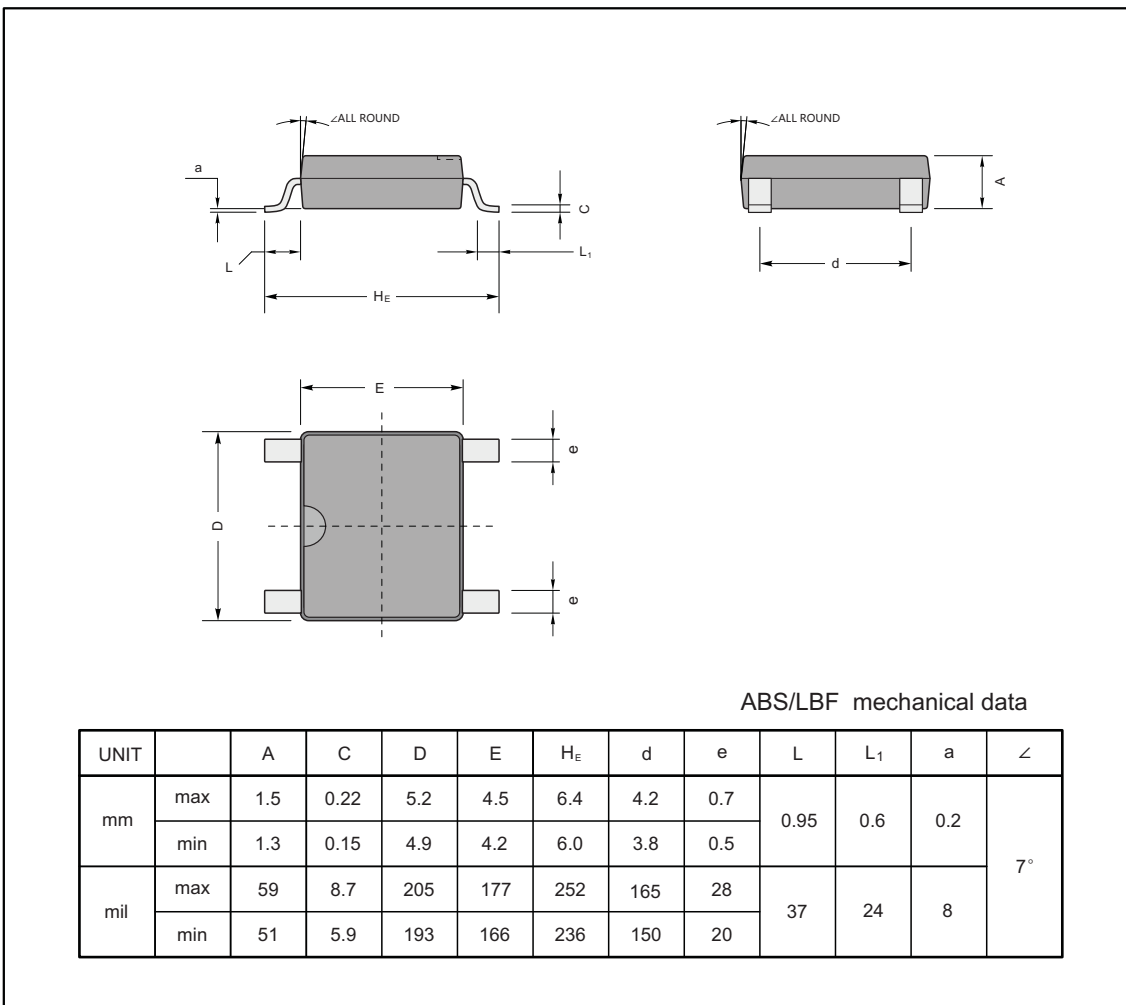




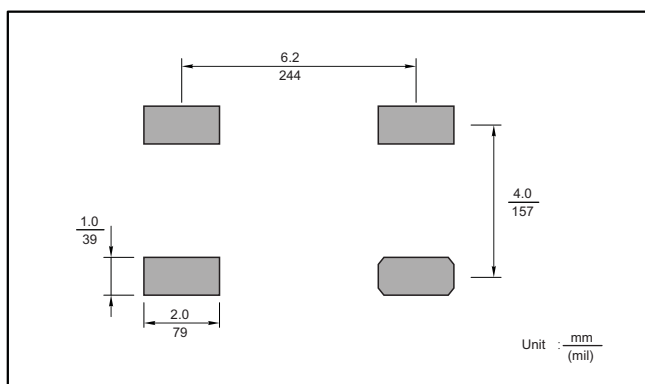
PACKAGE OUTLINE

Plastic surface mounted package; 4 leads

ABS/LBF



The recommended mounting pad size



Marking

Type number	Marking code
TB210SMG	TB210SG



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