



## 1A SURFACE MOUNT GLASS PASSIVATED BRIDGE RECTIFIER

### FEATURES:

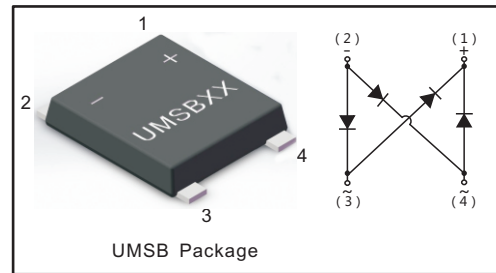
- Glass Passivated Chip Junction
- Reverse Voltage - 1400 V
- Forward Current - 2.0 A
- High Surge Current Capability
- Designed for Surface Mount Application

### MECHANICAL DATA

- Case: UMSB
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 0.234g / 0.00825oz

### PINNING

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



### 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	MSB20U	Units
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	1400	V
Maximum RMS voltage	$V_{RMS}$	980	V
Maximum DC Blocking Voltage	$V_{DC}$	1400	V
Average Rectified Output Current	$I_O$	2.0	A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)	$I_{FSM}$	30	A
$I^2t$ Rating for Fusing $1ms \leq t < 8.3ms$	$I^2t$	3.7	A <sup>2</sup> S
Maximum Forward Voltage at 2.0 A	$V_F$	1.1	V
Maximum DC Reverse Current at Rated DC Blocking Voltage @ $T_A=25^\circ C$ @ $T_A=125^\circ C$	$I_R$	3 100	$\mu A$
Typical Junction Capacitance ( Note1 )	$C_j$	20	pF
Typical Thermal Resistance ( Note2 )	$R_{\theta JA}$ $R_{\theta JC}$ $R_{\theta JL}$	60 10 25	$^\circ C/W$
Operating and Storage Temperature Range	$T_j, T_{stg}$	-55 ~ +150	$^\circ C$

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

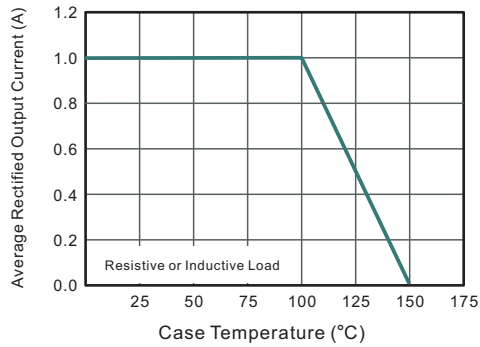


Fig.2 Typical Reverse Characteristics

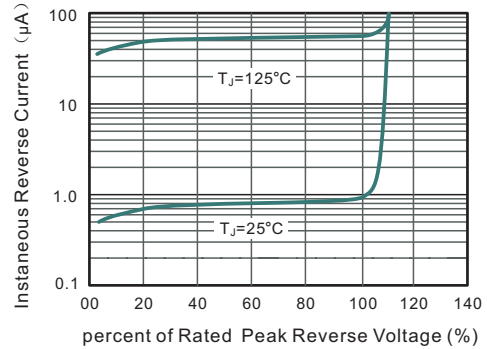


Fig.3 Typical Instantaneous Forward Characteristics

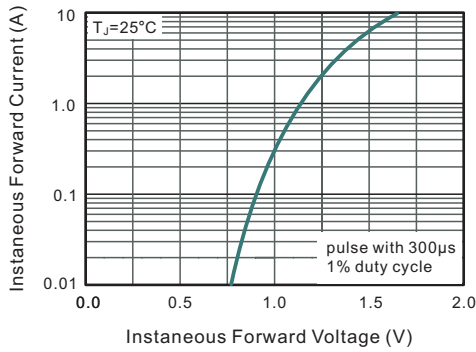


Fig.4 Typical Junction Capacitance

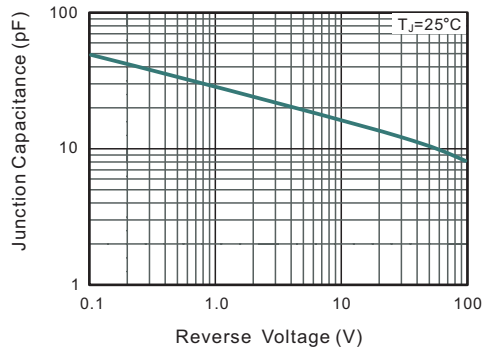


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

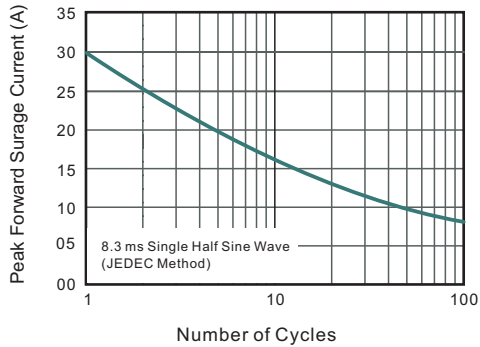
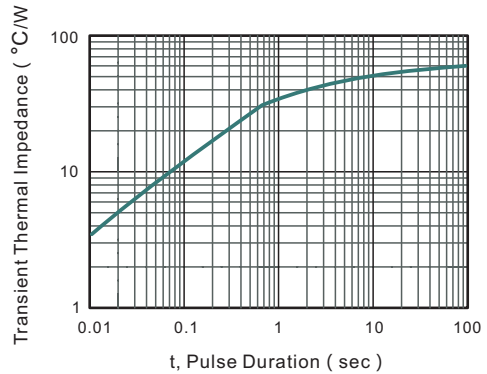


Fig.6- Typical Transient Thermal Impedance

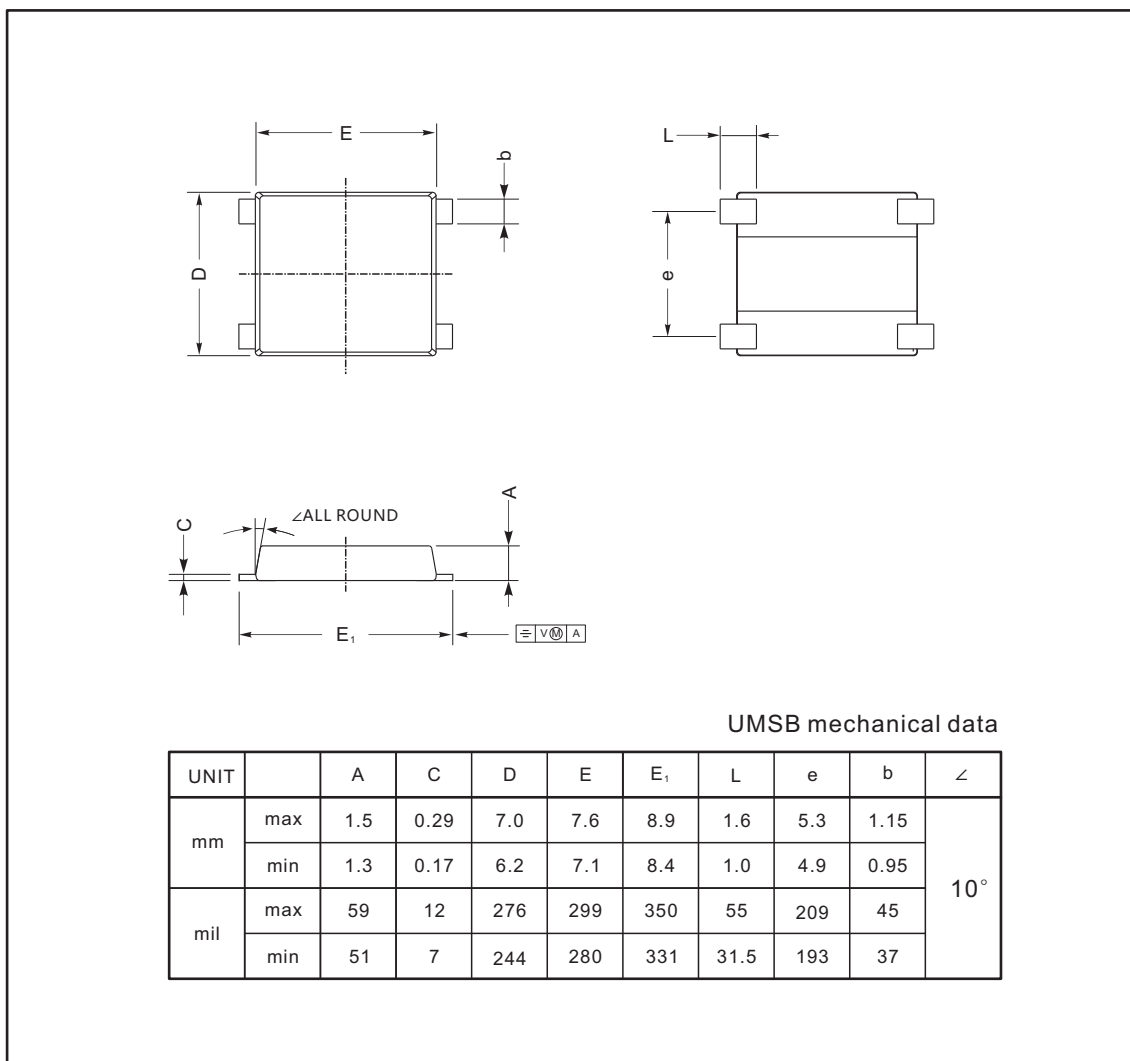




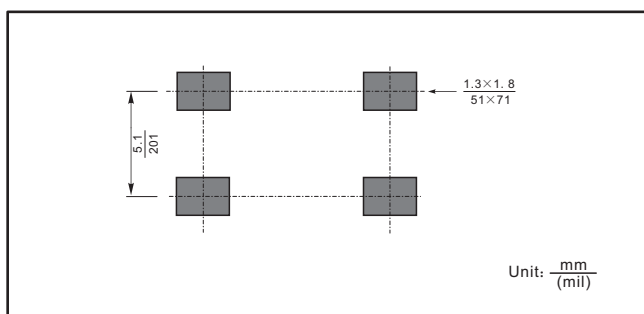
PACKAGE OUTLINE

Plastic surface mounted package; 4 leads

UMSB



The recommended mounting pad size



Marking

Type number	Marking code
MSB20U	MB20U



文件履历表

序号	制/修订日期	生效日期	版次	修订内容	变更原因	制/修订人	备注
01	2022.8.30	2022.8.	Rev 1.1	初版制定	/	张雷	



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