

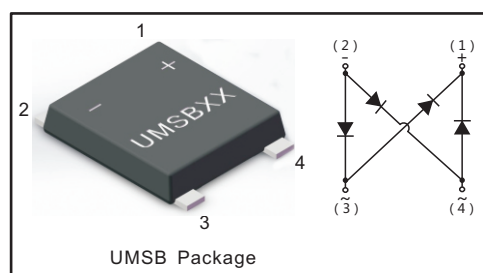
SURFACE MOUNT SCHOTTKY BRIDGE RECTIFIER

FEATURES:

- Reverse Voltage - 100 V
- Forward Current - 3 A
- High Surge Current Capability
- Designed for Surface Mount Application

PINNING

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



MECHANICAL DATA

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

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	UMSB310	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
Average Rectified Output Current at $T_c = 100\text{ }^\circ\text{C}$	I_O	3.0	A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	80	A
Maximum Forward Voltage at 3.0 A	V_F	0.85	V
Maximum DC Reverse Current $T_a = 25\text{ }^\circ\text{C}$ at Rated DC Blocking Voltage $T_a = 100\text{ }^\circ\text{C}$	I_R	0.3 5	mA
Typical Junction Capacitance (Note1)	C_j	160	pF
Typical Thermal Resistance (Note2)	$R_{\theta JA}$	65	$^\circ\text{C/W}$
Operating and Storage Temperature Range	T_j, T_{stg}	-55 ~ +150	$^\circ\text{C}$

Note: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 Average Rectified Output Current Derating Curve

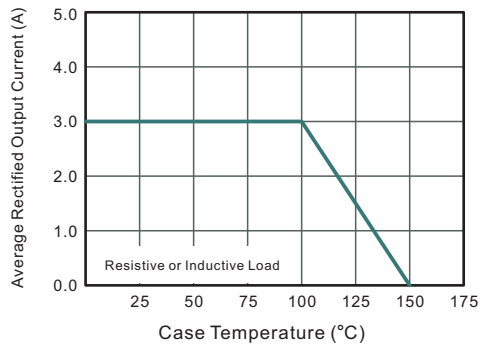


Fig.2 Typical Reverse Characteristics

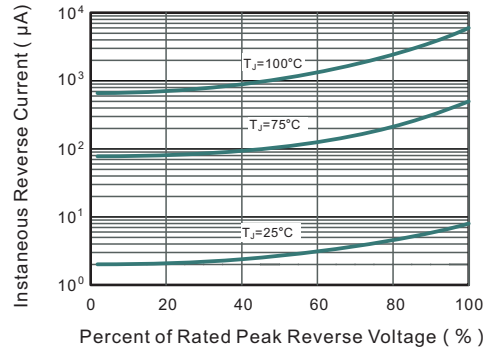


Fig.3 Typical Instantaneous Forward Characteristics

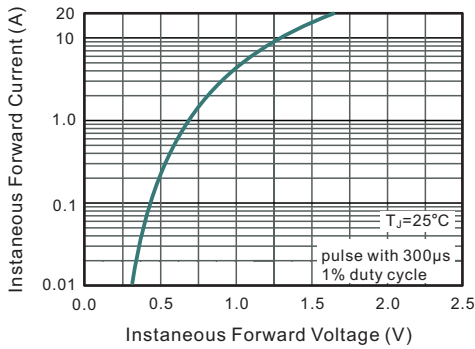


Fig.4 Typical Junction Capacitance

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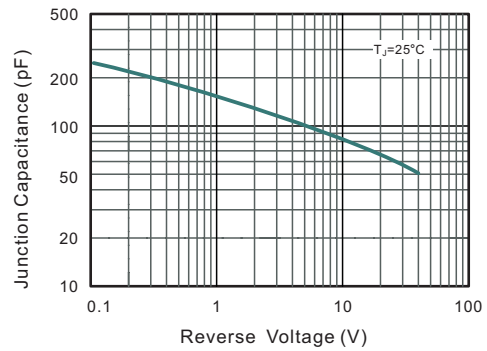


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

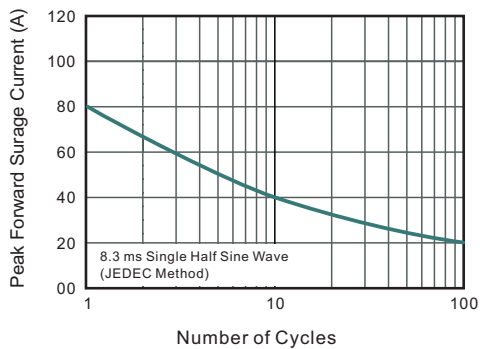
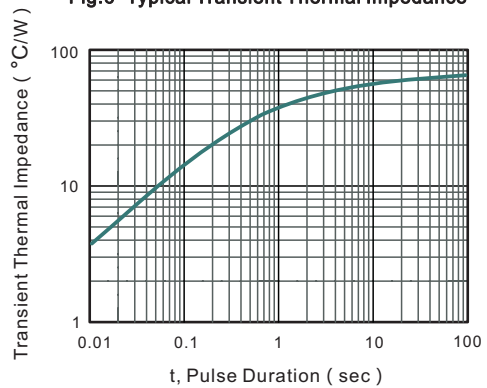


Fig.6- Typical Transient Thermal Impedance

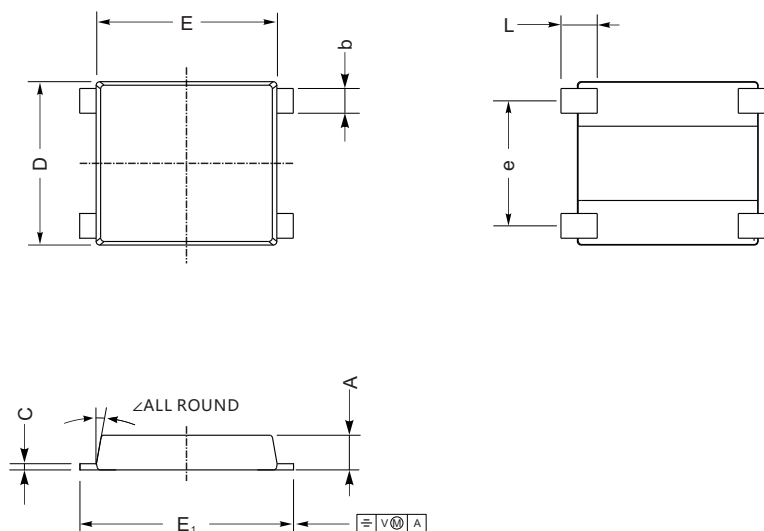




PACKAGE OUTLINE

Plastic surface mounted package; 4 leads

UMSB



M2 mechanical data

UNIT		A	C	D	E	E ₁	L	e	b	∠
mm	max	1.5	0.29	7.0	7.6	8.9	1.6	5.3	1.15	10°
	min	1.3	0.17	6.2	7.1	8.4	1.0	4.9	0.95	
mil	max	59	12	276	299	350	55	209	45	
	min	51	7	244	280	331	31.5	193	37	

Marking

Type number	Marking code
UMSB310	UMSB310