

TD3UF30M

Surface Mount Fast Recovery Bridge Rectifier Reverse Voltage - 1000 V Forward Current - 3 A

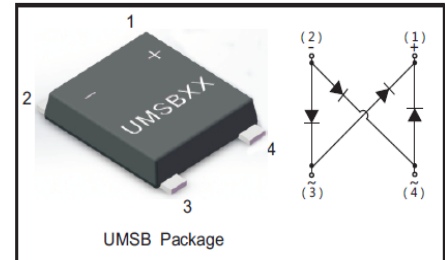
Features

- Glass passivated chip junction
- Fast reverse recovery time
- Designed for Surface Mount Application

Mechanical Data

- Case: Molded plastic, UMSB
- Terminals: solderable per MIL-STD-750, Method 2026

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



Absolute Maximum Ratings and Characteristics

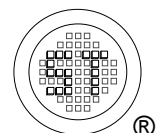
Ratings at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Parameter	Symbols	Value	Units
	Marking	UMB30M	-
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	1000	V
Maximum RMS Voltage	V_{RMS}	700	V
Maximum DC Blocking Voltage	V_{DC}	1000	V
Average Rectified Output Current (at $T_C = 115^\circ\text{C}$)	$I_{F(AV)}$	3	A
Peak Forward Surge Current 8.3 ms Single Half-sine-wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	90	A
Maximum Forward Voltage at 3 A	V_F	1.6	V
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	5	μA
DC Blocking Voltage		100	
Typical Junction Capacitance ¹⁾	C_j	50	pF
Typical Thermal Resistance ²⁾	$R_{\theta JA}$	40	$^\circ\text{C}/\text{W}$
Maximum Reverse Recovery Time ³⁾	t_{rr}	75	ns
Operating Junction and Storage Temperature Range	T_j, T_{stg}	- 55 to + 150	$^\circ\text{C}$

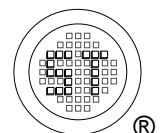
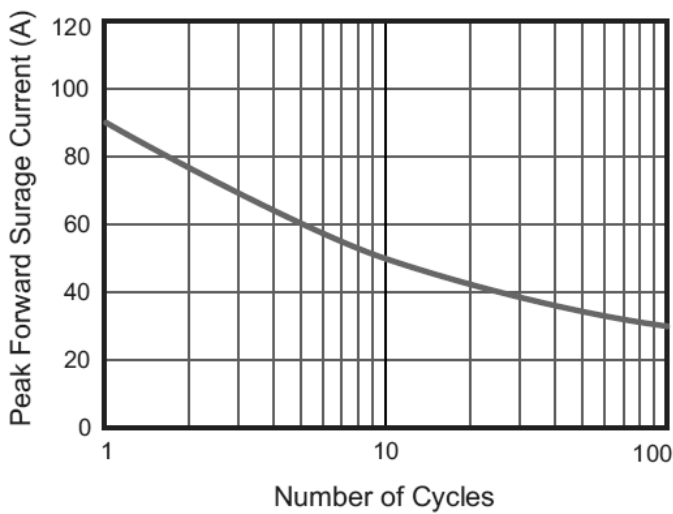
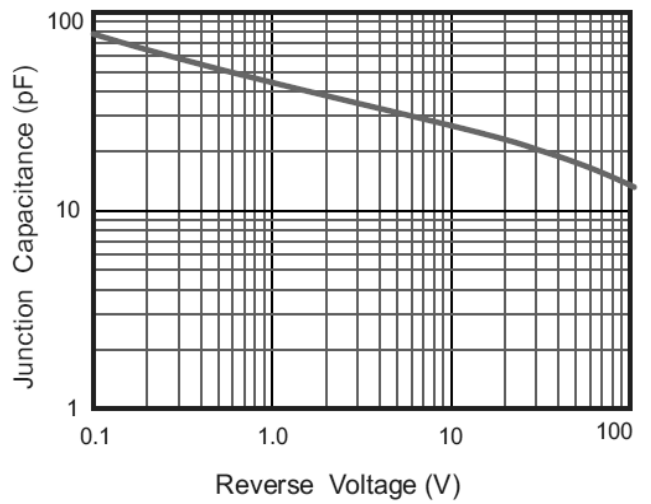
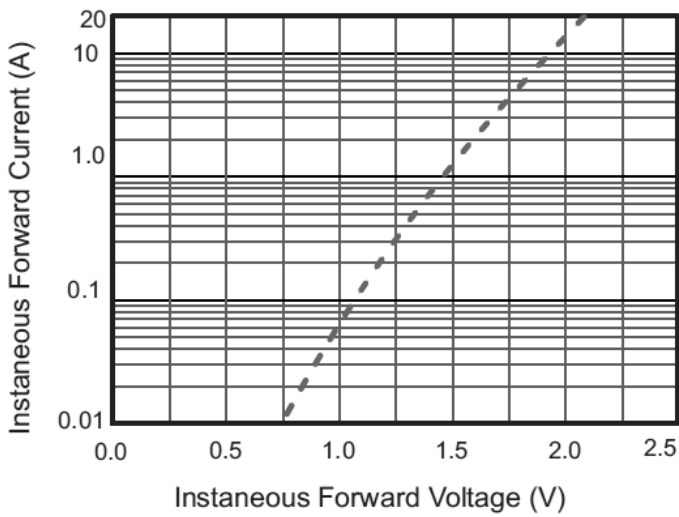
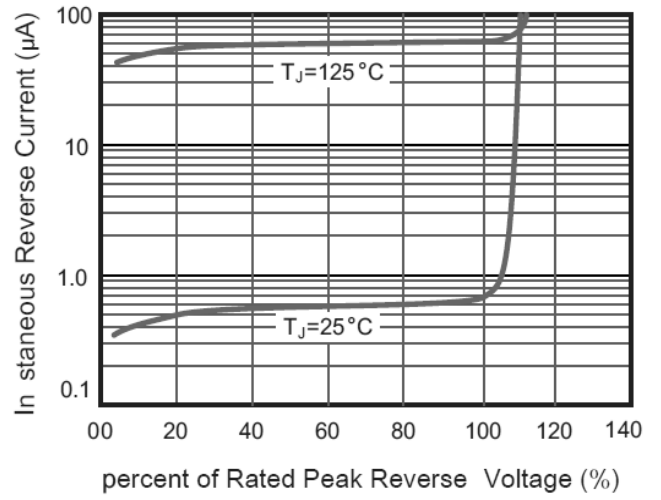
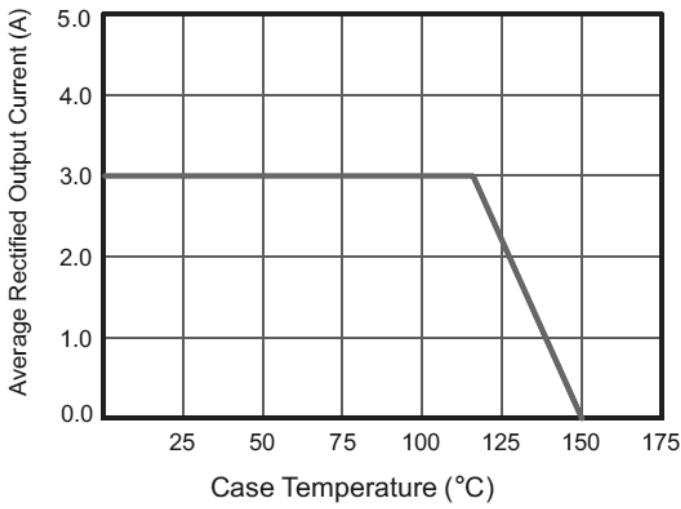
¹⁾ Measured at 1 MHz and applied reverse voltage of 4 V D.C.

²⁾ Mounted on glass epoxy PC board with 4 × 1.5" × 1.5" (3.81 × 3.81 cm) copper pad.

³⁾ Measured with $I = 0.5 \text{ A}$, $I = 1 \text{ A}$, $I_{rr} = 0.25 \text{ A}$.



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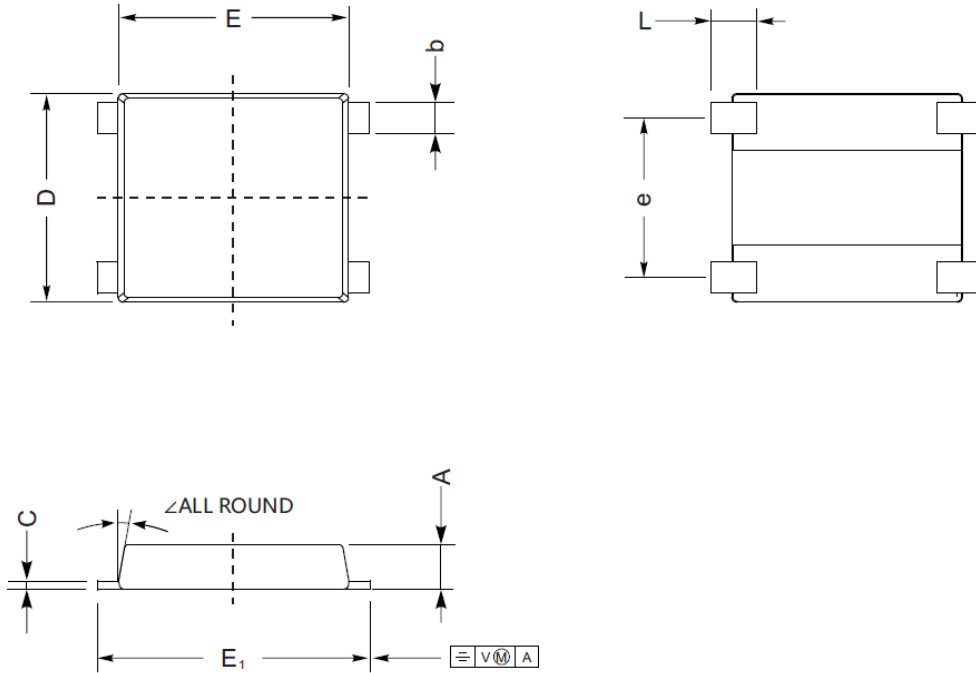


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PACKAGE OUTLINE

Plastic surface mounted package; 4 leads

UMSB



UNIT	A	C	D	E	E ₁	L	e	b	\angle
mm	1.5	0.29	7	7.6	8.9	1.6	5.3	1.15	10°
	1.3	0.17	6.2	7.1	7.9	1	4.9	0.95	

