

TD3F30MBL

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

Features

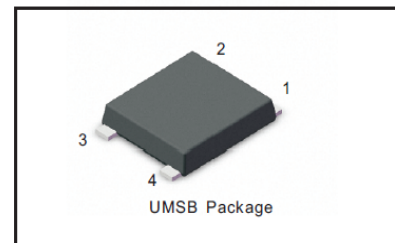
- Glass passivated chip junction
- Fast reverse recovery time
- Designed for Surface Mount Application

Mechanical Data

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

PINNING

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



Absolute Maximum Ratings and Characteristics

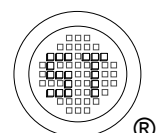
Ratings at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate current by 20%.

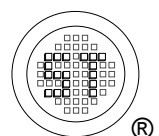
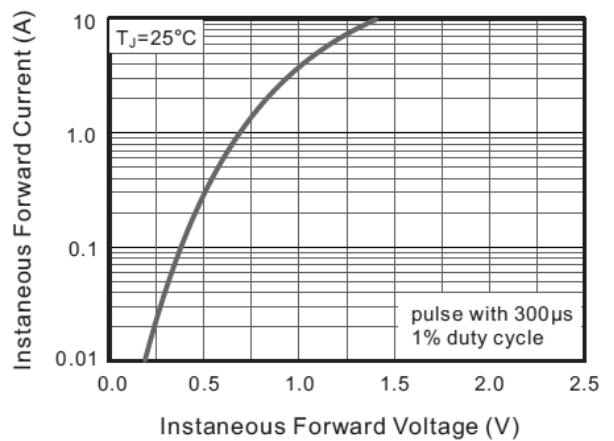
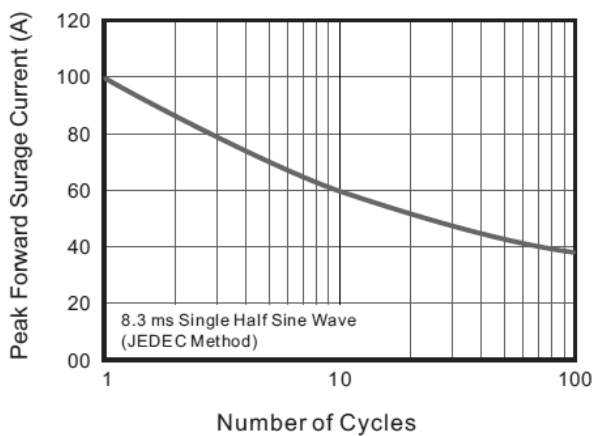
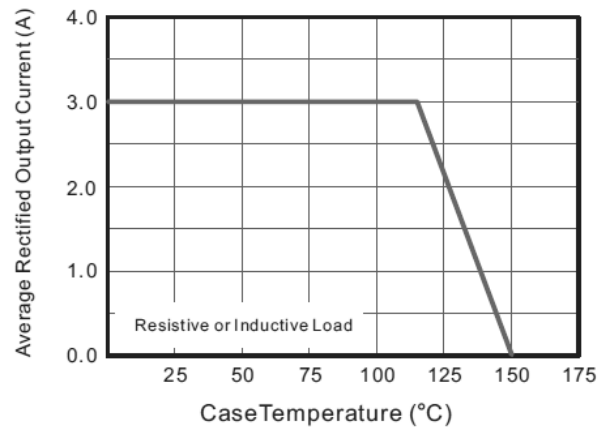
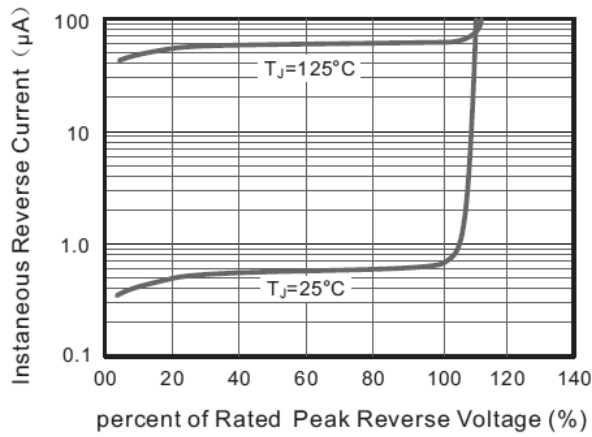
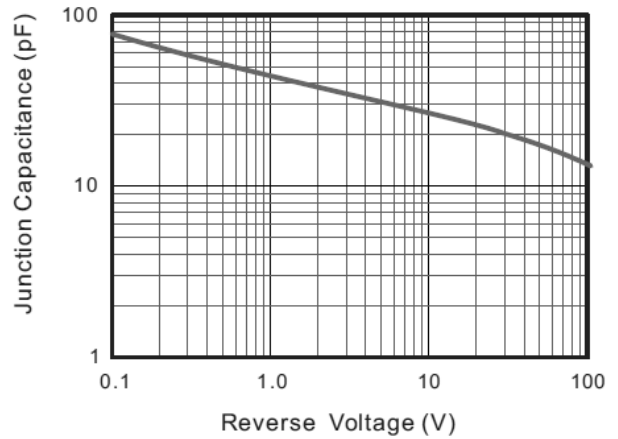
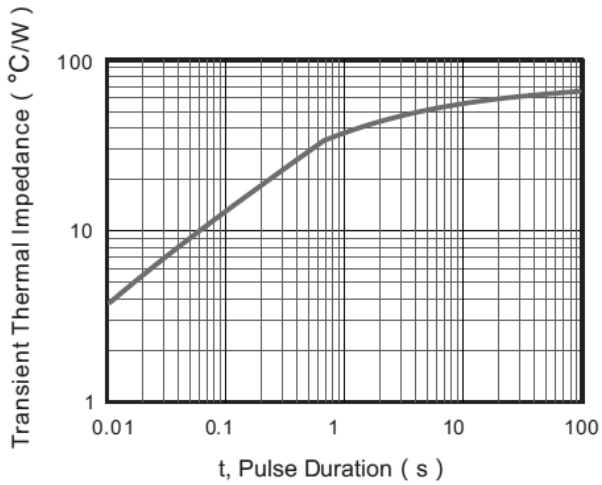
Parameter	Symbols	Value	Units
	Marking	FMB30M.	-
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	1000	V
Maximum RMS Voltage	V_{RMS}	700	V
Maximum DC Blocking Voltage	V_{DC}	1000	V
Average Rectified Output Current $T_C = 115^\circ\text{C}$	$I_{F(AV)}$	3	A
Peak Forward Surge Current 8.3 ms Single Half-sine-wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	100	A
Peak Forward Surge Current 1 ms Single Half-square-wave Superimposed on Rated Load	I_{FSM}	180	A
Maximum Forward Voltage at 3 A	V_F	1	V
Maximum DC Reverse Current at Rated DC Blocking Voltage DC Blocking Voltage	I_R	0.5	μA
Typical Junction Capacitance ¹⁾	C_J	40	pF
Typical Thermal Resistance ²⁾	$R_{\theta JA}$	35	$^\circ\text{C/W}$
Maximum Reverse Recovery Time ³⁾	t_{rr}	500	ns
Operating Junction and Storage Temperature Range	T_j, T_{stg}	- 55 to + 150	$^\circ\text{C}$

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

²⁾ Mounted on glass epoxy PC board with 4 x 1.5cm x1.5cm copper pad.

³⁾ Measured with $I_F = 0.5\text{ A}$, $I_R = 1\text{ A}$, $t_{rr} = 0.25\text{ A}$.

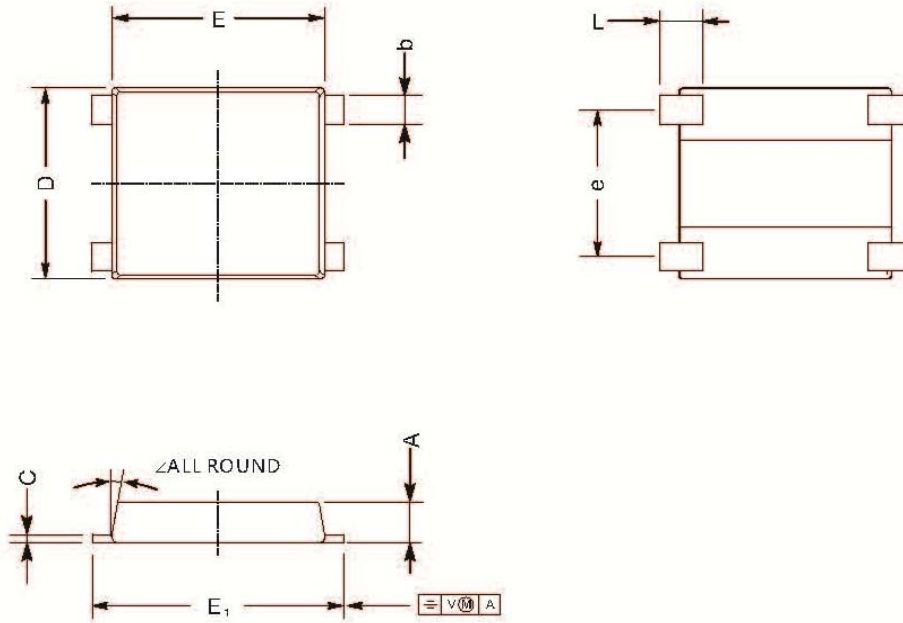




PACKAGE OUTLINE

UMSB

Plastic surface mounted package; 4 leads



UNIT	A	C	D	E	E ₁	L	e	b	\sphericalangle
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	

