

# TD4M40M

## Surface Mount Glass Passivated Bridge Rectifier

Reverse Voltage : 1000 V

Forward Current : 4 A

### Features

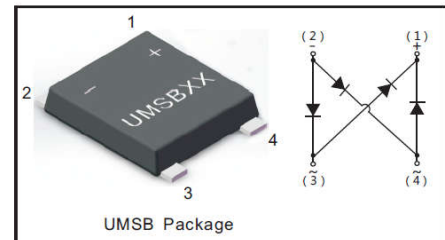
- Glass Passivated Chip Junction
- High Surge Current Capability

### Mechanical Data

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

### PINNING

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



### Absolute Maximum Ratings and Characteristics

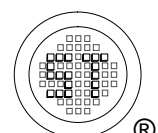
Ratings at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Parameter	Symbols	TD4M40M	Units
	Marking	MB40M	-
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	$I_{F(AV)}$	4	A
Peak Forward Surge Current 8.3 ms Single Half-sine-wave Superimposed on Rated Load (JEDEC Method)	$I_{FSM}$	150	A
$I^2t$ Rating for fusing (t = 8.3 ms)	$I^2t$	93.4	A <sup>2</sup> S
Maximum Forward Voltage at 2 A	$V_F$	1	V
Maximum DC Reverse Current at Rated DC Blocking Voltage	$I_R$	$T_a = 25^\circ\text{C}$ 5	$\mu\text{A}$
DC Blocking Voltage		$T_a = 125^\circ\text{C}$ 100	
Maximum Reverse Recovery Time <sup>1)</sup>	$t_{rr}$	10	$\mu\text{s}$
Typical Junction Capacitance <sup>2)</sup>	$C_j$	50	pF
Typical Thermal Resistance form Junction to Case <sup>3)</sup>	$R_{\theta JC}$	10	$^\circ\text{C/W}$
Typical Thermal Resistance form Junction to Ambient <sup>3)</sup>	$R_{\theta JA}$	60	$^\circ\text{C/W}$
Operating Junction and Storage Temperature Range	$T_j, T_{stg}$	- 55 to + 150	$^\circ\text{C}$

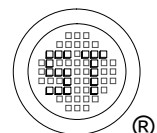
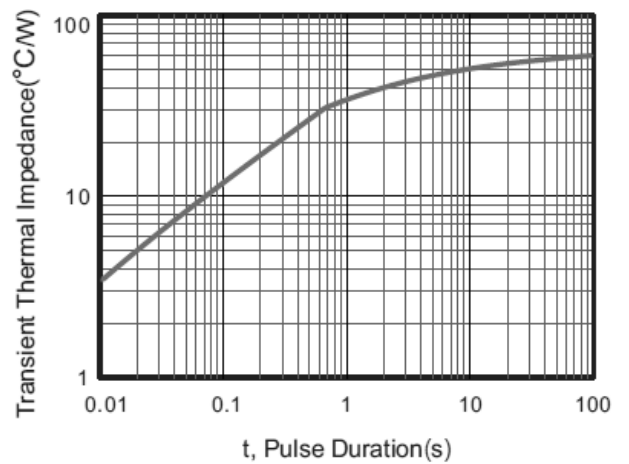
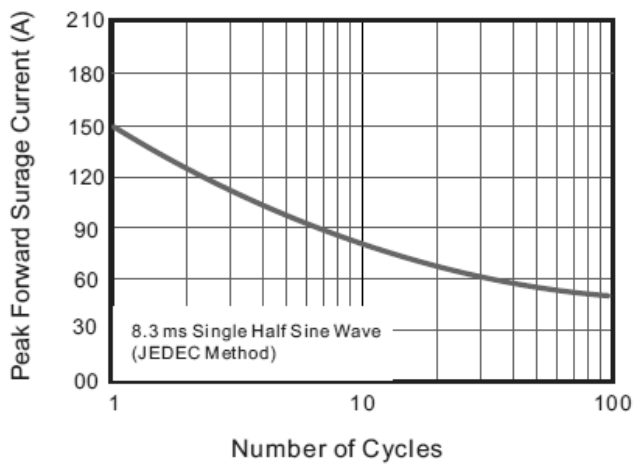
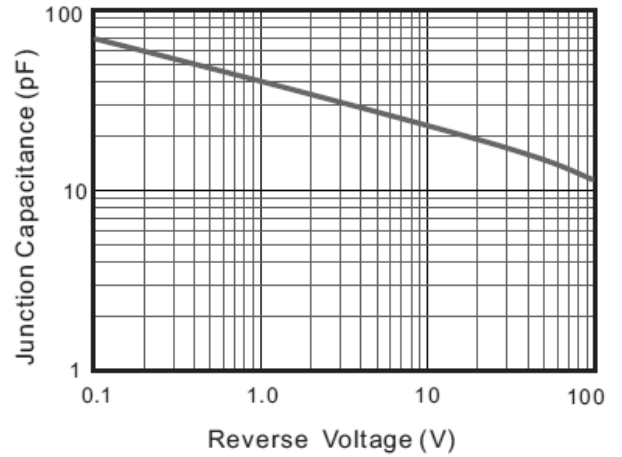
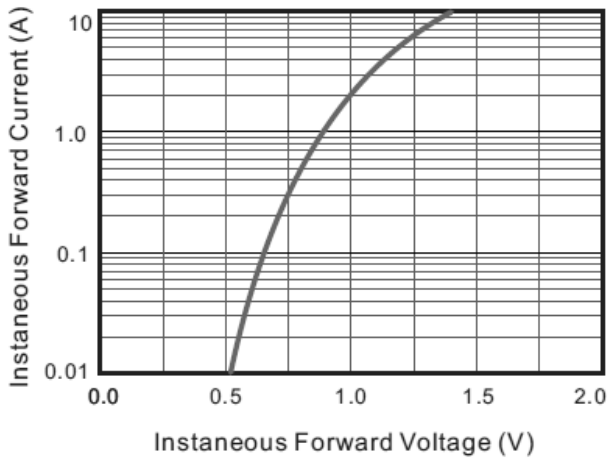
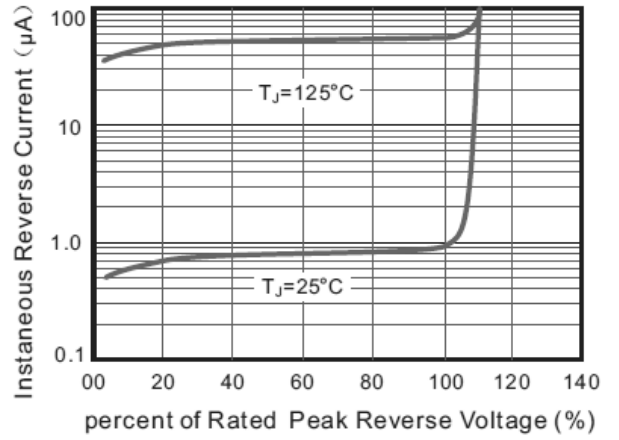
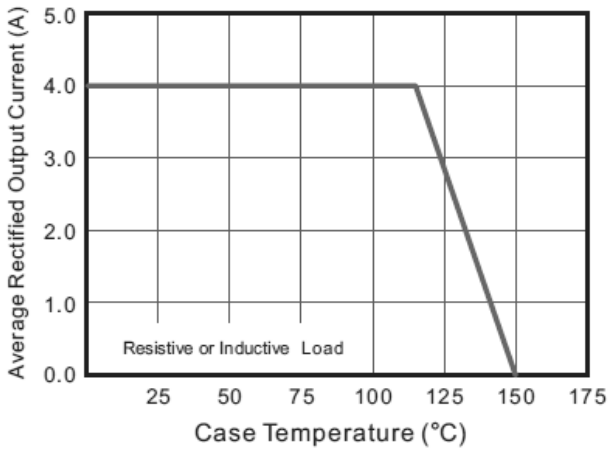
<sup>1)</sup> Measured with  $I_F = 0.5\text{ A}$ ,  $I_R = 1\text{ A}$ ,  $I_{rr} = 0.25\text{ A}$ .

<sup>2)</sup> Measured at 1MHz and applied reverse voltage of 4 V D.C.

<sup>3)</sup> Mounted on glass epoxy PC board with  $4 \times 1.5'' \times 1.5''$  ( $3.81 \times 3.81\text{ cm}$ ) copper pad.



# TD4M40M

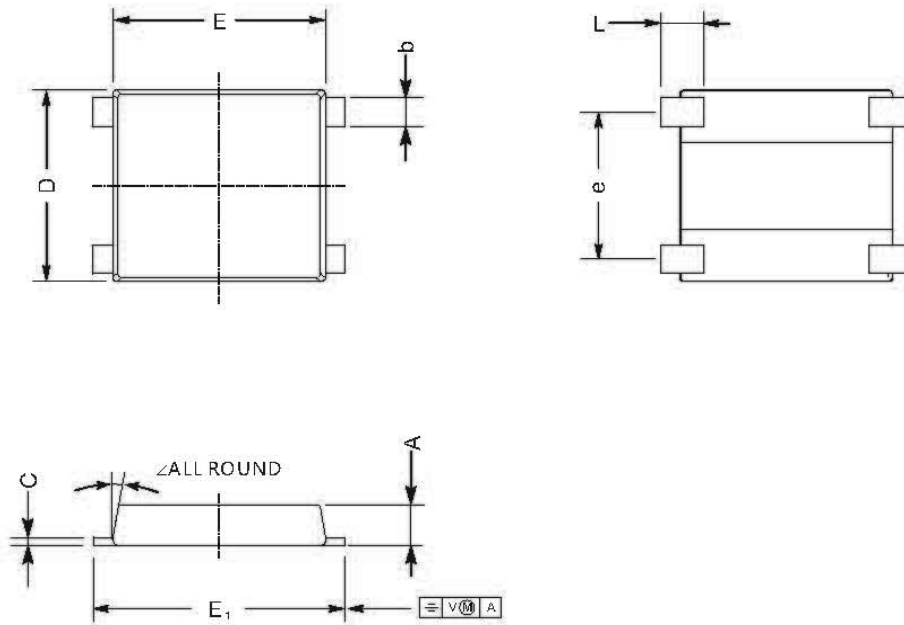


# TD4M40M

## PACKAGE OUTLINE

UMSB

Plastic surface mounted package; 4 leads



UNIT	A	C	D	E	E <sub>1</sub>	L	e	b	∠
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	

### Recommended Soldering Footprint

