

# TDS:EMIC

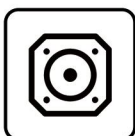
## 拓電半導體

自主封測 品質把控 售後保障

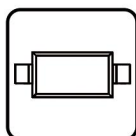
WEB | [WWW.TDSEMIC.COM](http://WWW.TDSEMIC.COM)



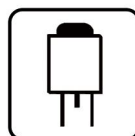
電源管理



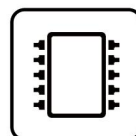
顯示驅動



二三極管



LDO穩壓器



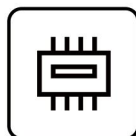
觸摸芯片



MOS管



運算放大器



存儲芯片



MCU



串口通信

# FMSB40M-TD

產品規格說明書

### 4.0 AMP SURFACE MOUNT BRIDGE RECTIFIERS

#### FEATURES:

- Glass Passivated Chip Junction
- Reverse Voltage - 50 to 1000 V
- Forward Current - 4.0 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

Marking code

FMB40A --- FMB40M

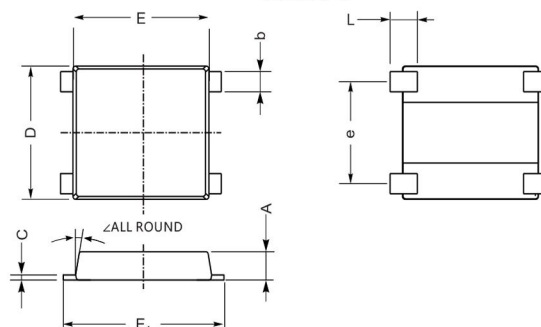
#### VOLTAGE RANGE

50 to 1000 Volts

#### CURRENT

4.0 Ampere

#### UMSB



UNIT		A	C	D	E	E <sub>1</sub>	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	

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

TYPE NUMBER	FMSB40A	FMSB40B	FMSB40D	FMSB40G	FMSB40J	FMSB40K	FMSB40M	UNIT	
Maximum Recurrent Peak Reverse Voltage	50	100	200	400	600	800	1000	V	
Maximum RMS Voltage	35	70	140	280	420	560	700	V	
Maximum DC Blocking Voltage	50	100	200	400	600	800	1000	V	
Maximum Average Forward Rectified Current at Ta=25°C								4.0	A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)								120	A
I <sup>2</sup> t Rating for Fusing (1ms < t < 8.3ms)								60	A <sup>2</sup> S
Maximum Forward Voltage Drop per Bridge Element at 4.0A .								1.3	V
Maximum DC Reverse Current Ta=25°C								5.0	μA
at Rated DC Blocking Voltage Ta=100°C								200	μA
Maximum Reverse Recovery Time (Note 1)								500	ns
Typical Junction Capacitance (Note 2)								50	pF
Typical Thermal Resistance R <sub>JA</sub> (Note 3)								30	°C/W
Operating and Storage Temperature Range T <sub>J</sub> , T <sub>STG</sub>								-65 — +150	°C

#### NOTES:

1. Reverse Recovery Time test condition: IF=0.5A, IR=1.0A, IRR=0.25A
2. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
3. Thermal Resistance from Junction to Ambient.

REV 1.0 2017 JAN

### RATING AND CHARACTERISTIC CURVES (FMSB40A THRU FMSB40M)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

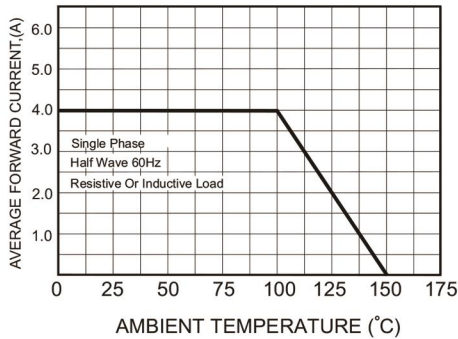


FIG.2-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

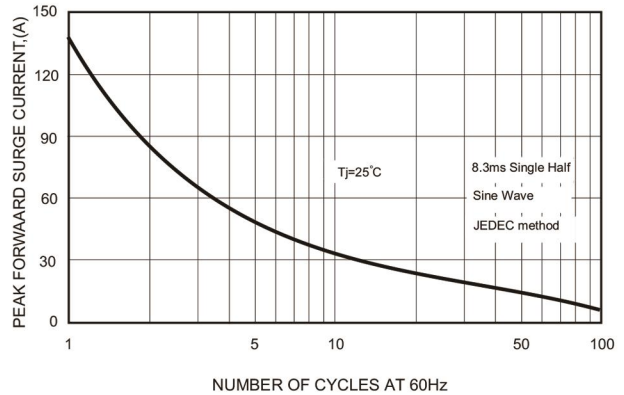


FIG.3-TYPICAL FORWARD CHARACTERISTICS

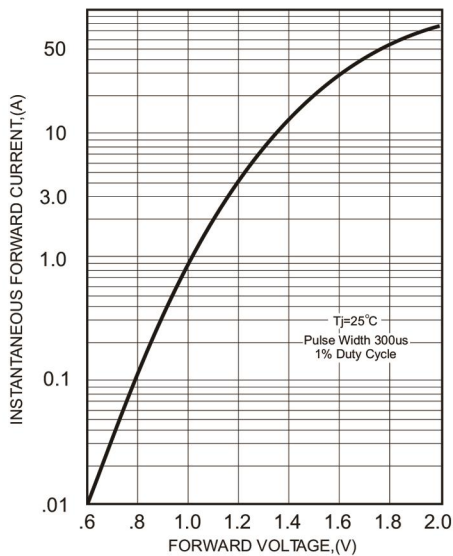


FIG.4-TYPICAL REVERSE CHARACTERISTICS

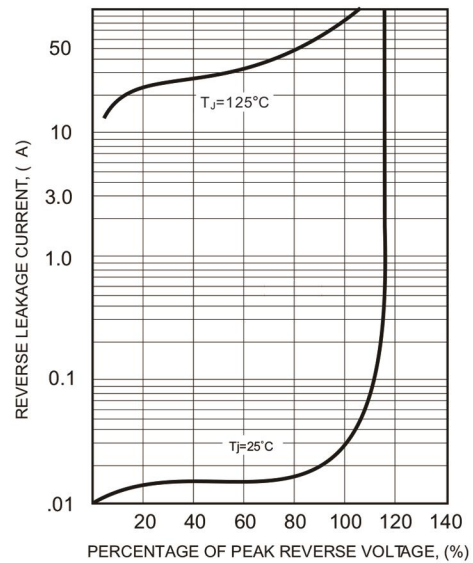


FIG.5-TYPICAL JUNCTION CAPACITANCE

