

CURRENT 4 Ampere  
 VOLTAGE RANG 100~1000 Volts

GLASS PASSIVATED SURFACE MOUNT BRIDGE RECTIFIER RECTIFIERS

**FMB40B-FMB40M**

## FMB40B-FMB40M

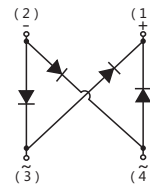
### Features:

- Glass Passivated Chip Junction
- Reverse Voltage - 100 to 1000 V
- Forward Current - 4.0 A
- Designed for Surface Mount Application
- Fast reverse recovery time

FMB-4



PINNING



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

### Absolute Maximum Ratings (Ta=25°C unless otherwise noted)

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	FMB40B	FMB40D	FMB40G	FMB40J	FMB40K	FMB40M	Units
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	100	200	400	600	800	1000	V
Maximum RMS voltage	$V_{RMS}$	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	$V_{DC}$	100	200	400	600	800	1000	V
Average Rectified Output Current at $T_c = 115^\circ\text{C}$	$I_o$	4.0						A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)	$I_{FSM}$	95						A
Maximum Forward Voltage at 4.0 A	$V_F$	1.3						V
Maximum DC Reverse Current at Rated DC Blocking Voltage $T_a = 25^\circ\text{C}$ $T_a = 125^\circ\text{C}$	$I_R$	5.0 200						$\mu\text{A}$
Typical Junction Capacitance ( Note1 )	$C_j$	50						pF
Typical Thermal Resistance ( Note2 )	$R_{\theta JA}$	40						$^\circ\text{C}/\text{W}$
Maximum Reverse Recovery Time ( Note3 )	$t_{rr}$	150		250		500		ns
Operating and Storage Temperature Range	$T_j, T_{stg}$	-55 ~ +150						$^\circ\text{C}$

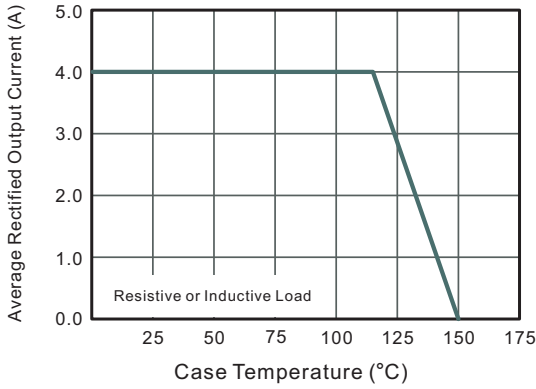
Note: 1. Measured at 1 MHz and applied reverse voltage of 4 V D.C  
 2. Mounted on glass epoxy PC board with 4×1.5"×1.5" ( 3.81×3.81 cm ) copper pad.  
 3. Measured with  $I_F = 0.5\text{ A}$ ,  $I_R = 1\text{ A}$ ,  $I_{rr} = 0.25\text{ A}$ .

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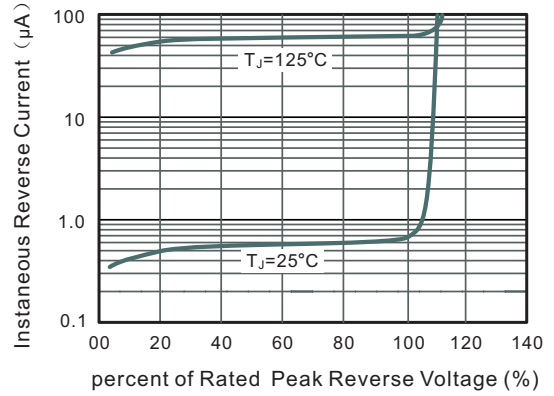
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**Typical Characteristics**

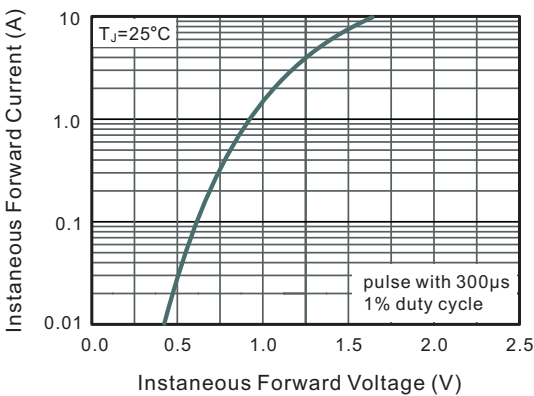
**Fig.1 Average Rectified Output Current Derating Curve**



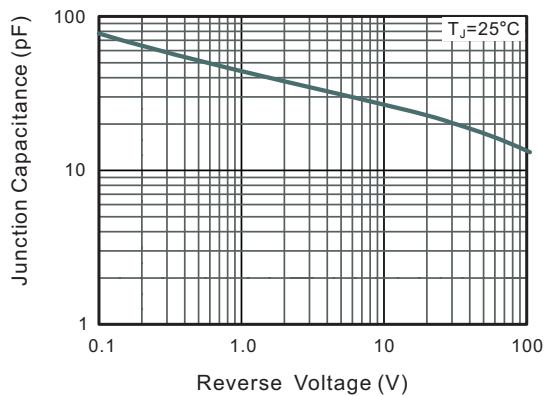
**Fig.2 Typical Reverse Characteristics**



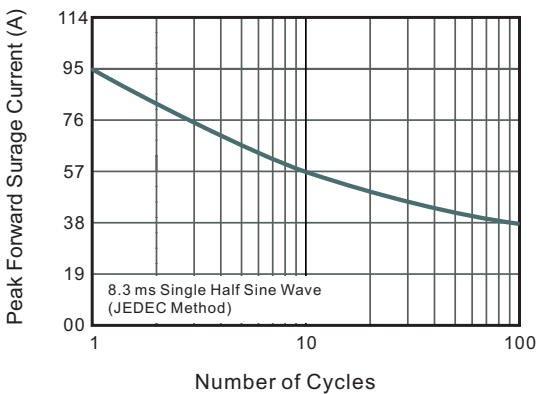
**Fig.3 Typical Instantaneous Forward Characteristics**



**Fig.4 Typical Junction Capacitance**



**Fig.5 Maximum Non-Repetitive Peak Forward Surge Current**

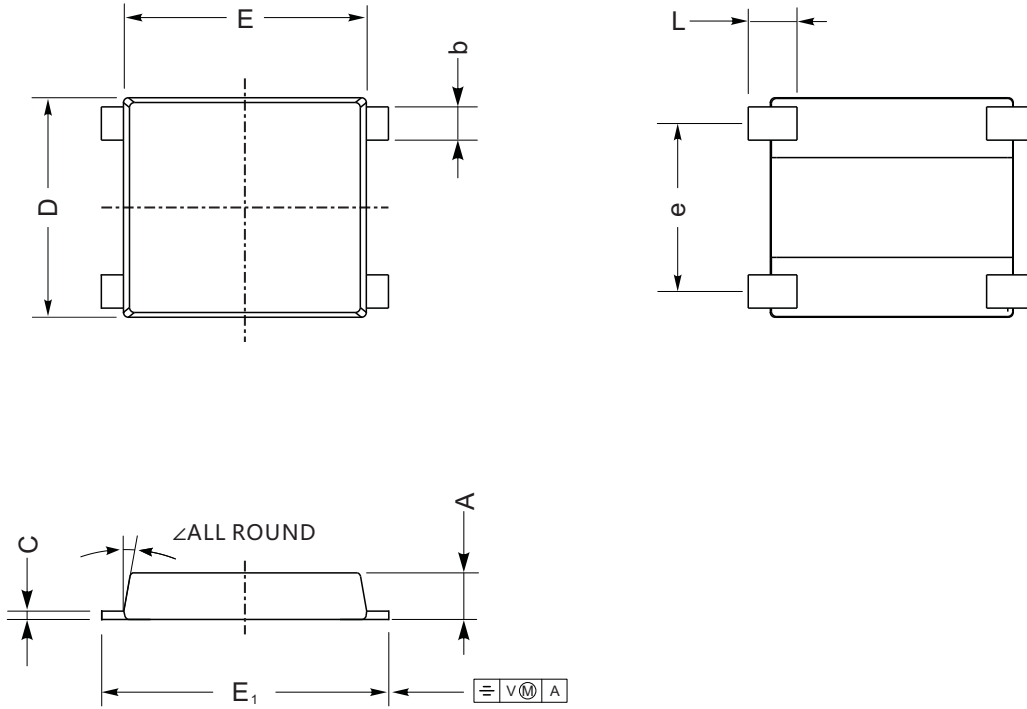


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FMB mechanical data

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	