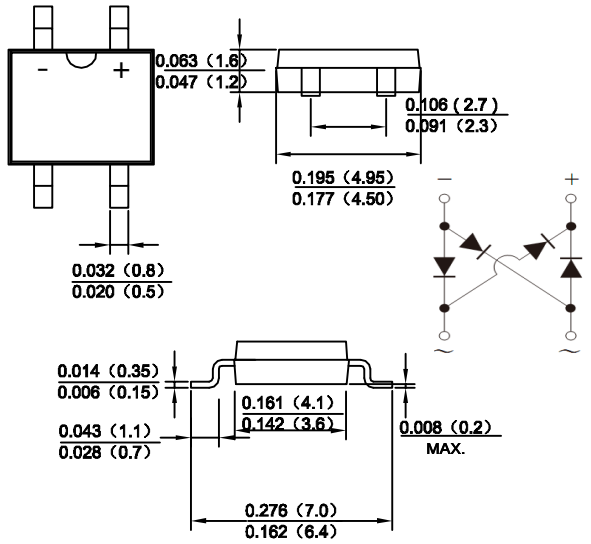
EMB1FU THRU EMB6FU

SINGLE PHASE 1.0AMP SUPER FAST GLASS PASSIVATED BRIDGE RECTIFIER

Features

- Glass passivated die construction
- Low forward voltage drop
- High current capability
- High surge current capability
- Designed for surface mount application
- Plastic material-UL flammability 94V-0

MBF



dimensions in inches and (millimeters)

Mechanical Data

- Case: MB-F, molded plastic
- Terminals: plated leads solderable per MIL-STD-202, Method 208
- Polarity: as marked on case
- Mounting position: Any
- Marking: type number
- Lead Free: For RoHS / Lead Free Version,

Maximum Ratings and Electrical Characteristics

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

TYPE NUMBER	SYMBOL	EMB1FU	EMB2FU	EMB3FU	EMB4FU	EMB6FU	UNITS
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_{DC}	100	200	300	400	600	V
RMS Reverse Voltage	V_{RMS}	70	140	210	280	420	V
Maximum average forward rectified current @T_C=100℃	IF(AV)	1.0					A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	35					A
I^2t Rating for Fusing (t < 8.3ms)	I^2t	5.083					A^2s
Forward Voltage per element @IF=1.0A	V_{FM}	0.95		1.25		1.7	V
Peak Reverse Current @T_A=25 ℃ At Rated DC Blocking Voltage @T_A =125 ℃	I_R	5.0 200					uA
Maximum reverse recovery time (Note 1)	T_{RR}	35					nS
Typical Junction Capacitance per leg	C_J	25					pF
Typical Thermal Resistance per leg (Note 2)	$R_{\theta JA}$ $R_{\theta JL}$	60 16					℃/W
Operating and Storage Temperature Range	T_J,T_{STG}	-55to+150					℃

Note:1. Reverse Recovery Test Conditions: I_F=0.5A, I_R=1.0A, I_{RR}=0.25A
2.Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B with 0.5×0.5"(13×13mm)copper pads.

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Fig. 1 Output Current Derating Curve

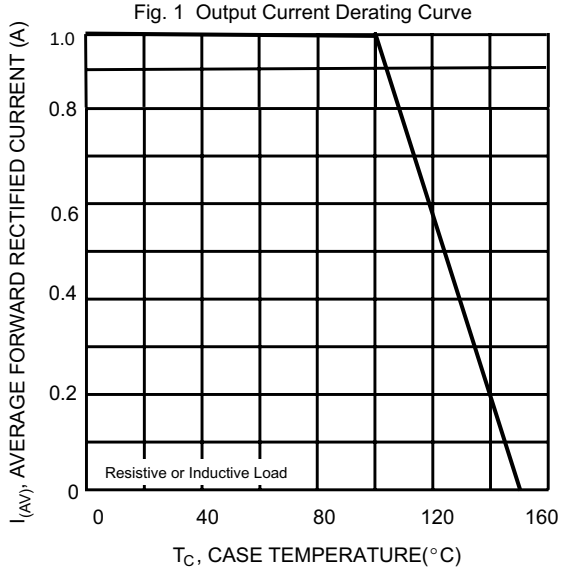


Fig. 2 Typical Forward Characteristics (per leg)

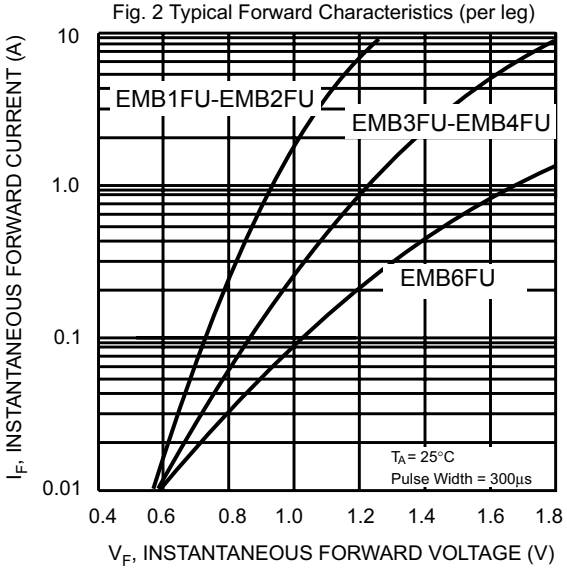


Fig. 3 Maximum Peak Forward Surge Current (per leg)

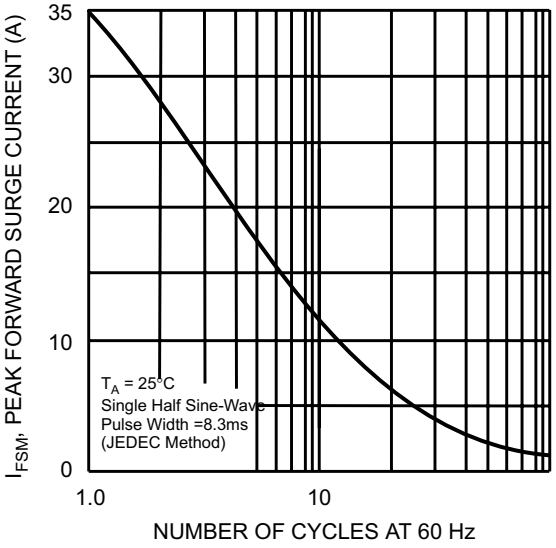


Fig. 4 Typical Junction Capacitance

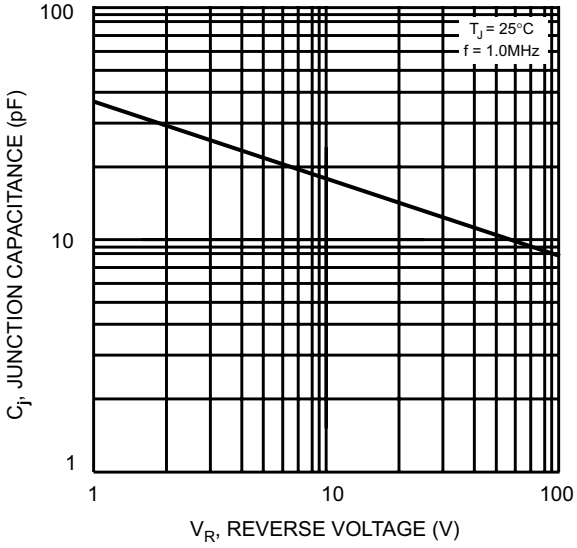


FIG.5 TYPICAL REVERSE CHRACTERISTICS

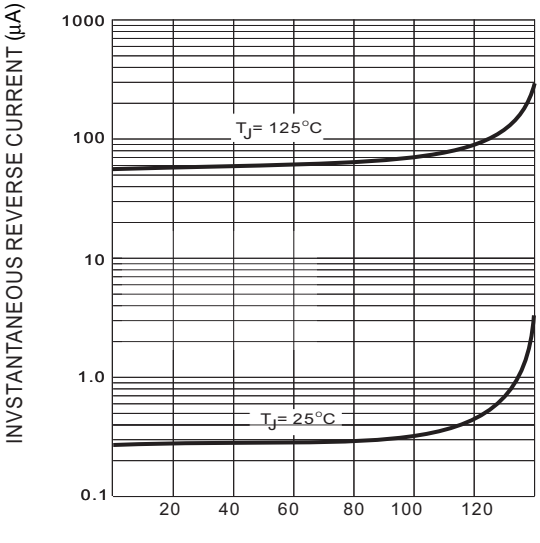
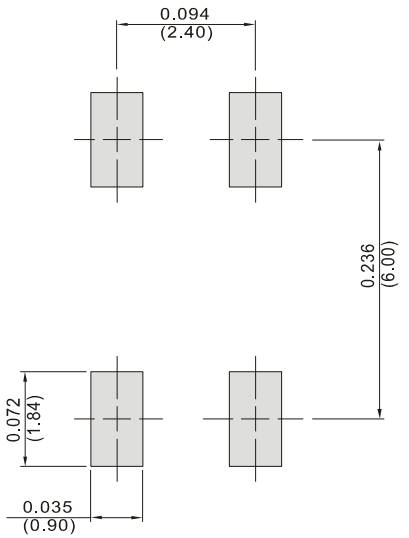


FIG.6 MOUNTING PAD LAYOUT



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