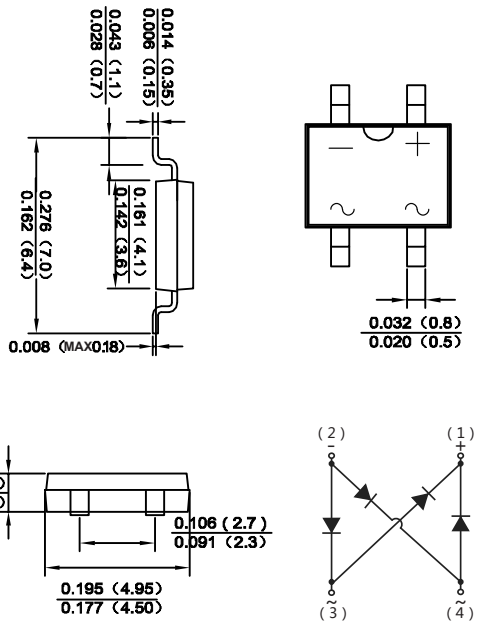
JXND ELECTRONICS CO.,LTD

SINGLE PHASE GLASS PASSIVATED BRIDGE RECTIFIERS MB2F THRU MB10F

Features

1. Glass passivated die construction
2. Low forward voltage drop
3. High current capability
4. High surge current capability
5. Designed for surface mount application
6. Plastic material-UL flammability 94V-0

MBF



Dimensions in inches and (millimeters)

Mechanical Data

Case : JEDEC MBF Molded plastic body
Terminals : Solder plated, solderable per MIL-STD-750,Method 2026
Polarity : Polarity symbol marking on body
Mounting Position : Any
Weight : 0.0026 ounce, 0.075 grams

Maximum Ratings And Electrical Characteristics

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

Parameter	SYMBOLS	MB2F	MB4F	MB6F	MB8F	MB10F	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	200	400	600	800	1000	V
Maximum RMS voltage	V_{RMS}	140	280	420	560	700	V
Maximum DC blocking voltage	V_{DC}	200	400	600	800	1000	V
Maximum average forward rectified current at T_C=125°C	$I_{F(AV)}$	1.0					A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	35					A
Maximum instantaneous forward voltage drop per leg at 0.5A	V_F	1.1					V
Maximum DC reverse current at rated DC blocking voltage TA=25℃ / TA=100℃	I_R	5 / 0.5					uA / mA
Typical junction capacitance	C_J	13					pF
Typical thermal resistance(NOTE3)	$R_{\theta JA}$	60					°C/W
Operating temperature range	T_J	-55 to +150					°C
storage temperature range	T_{STG}	-55 to +150					°C

NOTES:1.On glass epoxy P.C.B. mounted on 0.05x0.05"(1.3x1.3mm) pads
2.On aluminum substrate P.C.B. with on area of 0.8"x0.8"(20x20mm) mounted on 0.05X0.05"(1.3X1.3mm) solder pad
3.Measured at 1.0MHz and applied reverse voltage of 4.0 volts.

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Ratings And Characteristic Curves

Fig. 1 Output Current Deratin g Curve

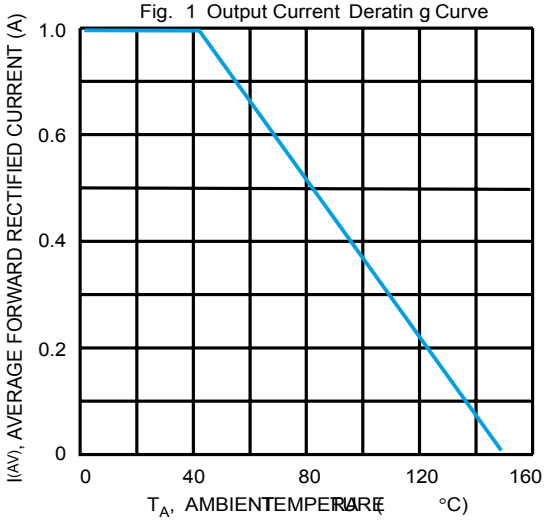


Fig. 2 Typical Forward Characteristics (per leg)

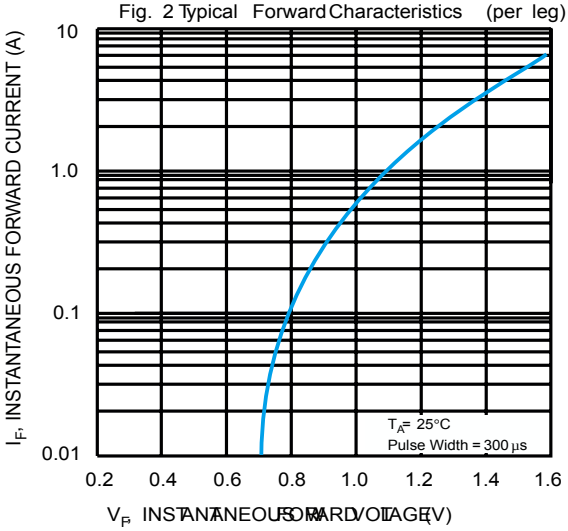


Fig. 3 Maximum Peak Forward Surge Current (per leg)

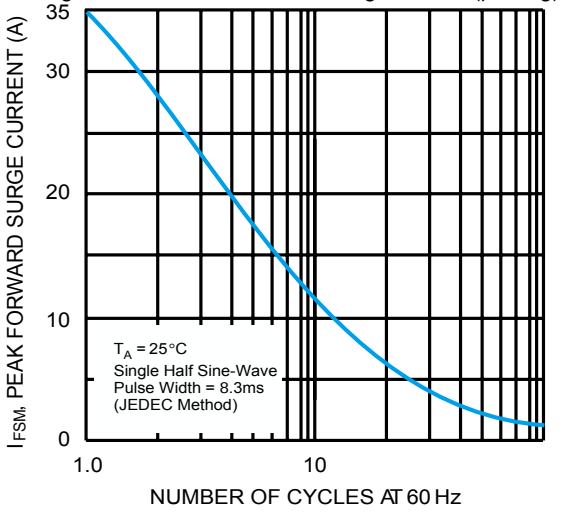


Fig. 4 Typical Junction Capacitance

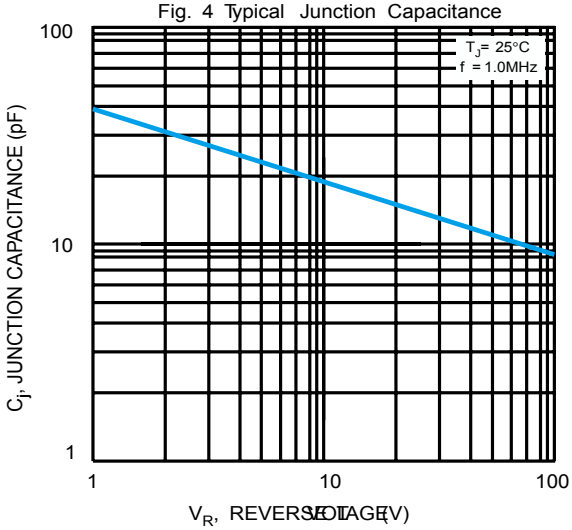
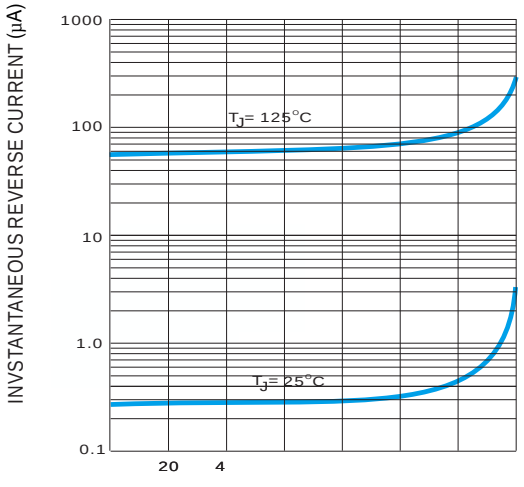
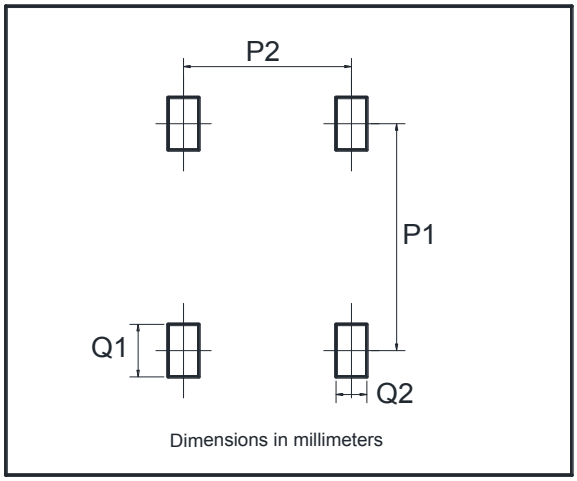


FIG.5 TYPICAL REVERSE CHRACTERISTICS



Suggested Pad Layout



Dim	Min
P1	6.00
P2	2.40
Q1	1.84
Q2	1.20