

1.0A Single-Phase GLass Passivated Bridge Rectifiers

Recifier Reverse Voltage 50V to 1000V



MBF

Features

- Glass passivated junction
- The plastic material used carries Underwriters Laboratory flammability recognition 94V-0
- Surge overload ratings to 50 amperes peak
- Ideal for printed circuit board application
- High temperature soldering guaranteed 265°C/10 seconds at 5 lbs(2.3kg)tension

Mechanical Data

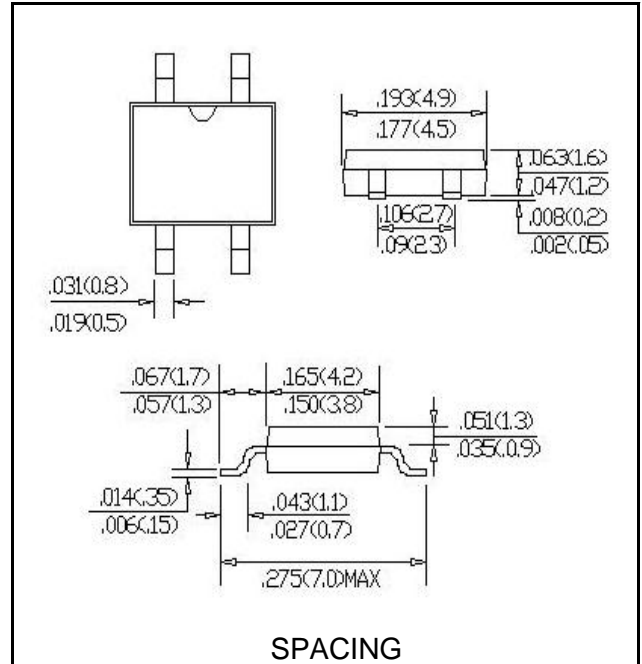
Case:Molded plastic

Terminals:Platde leads solderable per MIL-STD-750, Method 2026

Polarity:Polarity symbols molded or Marked on body

Mounting Position:Any

Weight:0.0028ounce,0.08 grams(approx)



Maximum Ratings & Thermal Characteristics

Rating at 25°C ambient temperature unless otherwise specified, Resistive or inductive load, 60HZ.

For Capacitive load derate current by 20%

Parameter	Symbol	MB05F	MB1F	MB2F	MB4F	MB6F	MB8F	MB10F	unit
Maximum repetitive peak reverse voltage	V _{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS bridge input voltage	V _{RMS}	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	V _{DC}	50	100	200	400	600	800	1000	V
Maximum average forward rectified current @TA=40°C	I _{F(AV)}	1.0							A
Peak forward surge current 8.3ms single half sine-wave super imposed on rated load (JEDEC Method)	I _{FSM}	35							A
Maximum instantaneous forward voltage drop per leg at 0.8A	V _F	1.1							V
Maximum DC reverse current TA=25°C at rated DC blocking voltage TA=125°C	I _R	5							μA
Rating for fusing(t<8.3ms)	I ² t	5.1							A ² sec
Typical Junction capacitance per element(Note 1)	C _j	15.0							pF
Typical thermal resistance (Note 2)	R _{θJA}	134							°C/W
Operating temperature range	T _J	-55to+150							°C
Storage temperature range	T _{STG}	-55to+150							°C

Notes: (1).Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

(2).Thermal resistance Junction to ambient mounted on P.C.B with 0.5*0.5"(13*13mm)copper pads.

Rating and Characteristic Curves (TA=25°C Unless otherwise noted)

FIG.1-DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

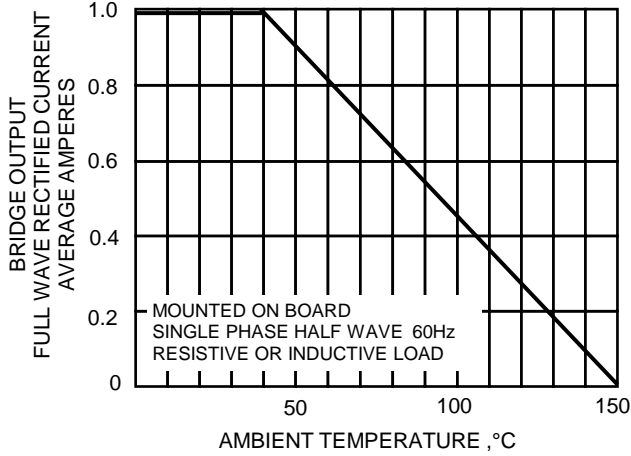


FIG.2-MAXIMUM NON-REPETITIVE SURGE CURRENT

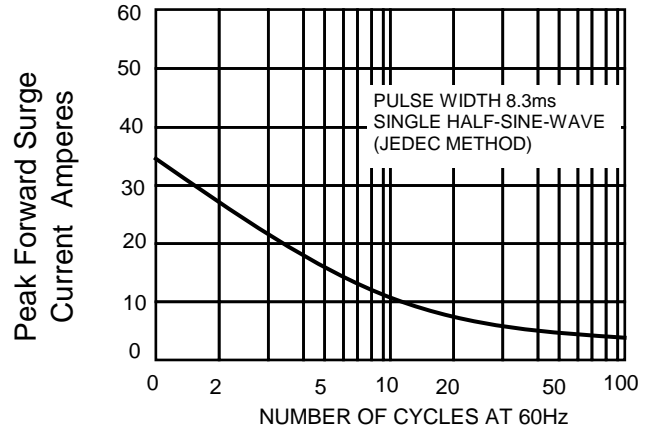


FIG.3-TYPICAL JUNCTION CAPACITANCE

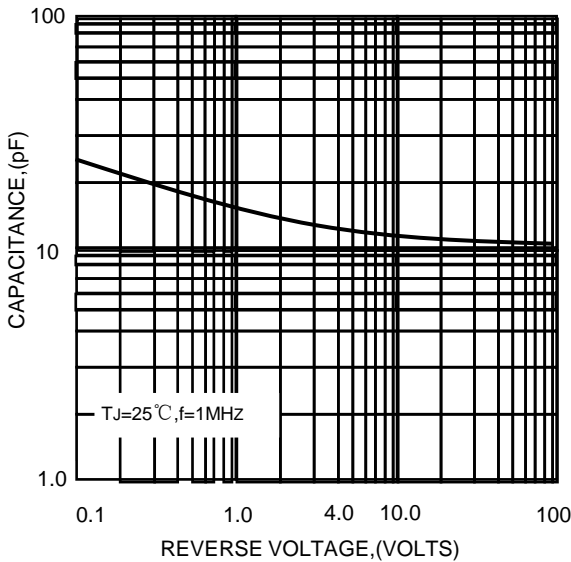


FIG.4-TYPICAL FORWARD CHARACTERISTICS

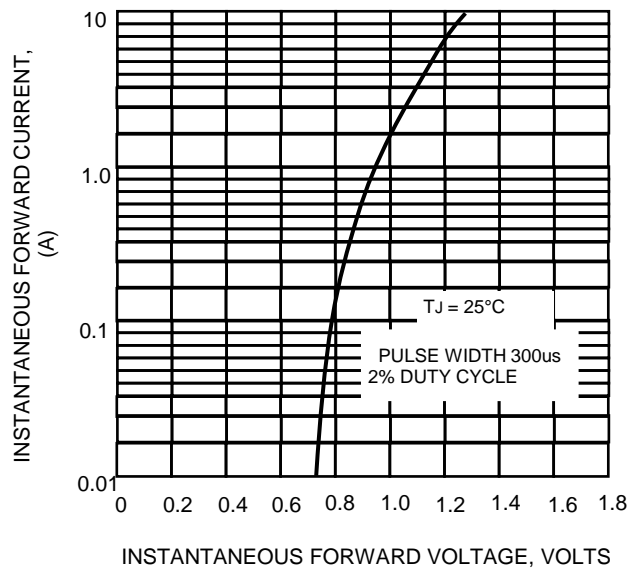
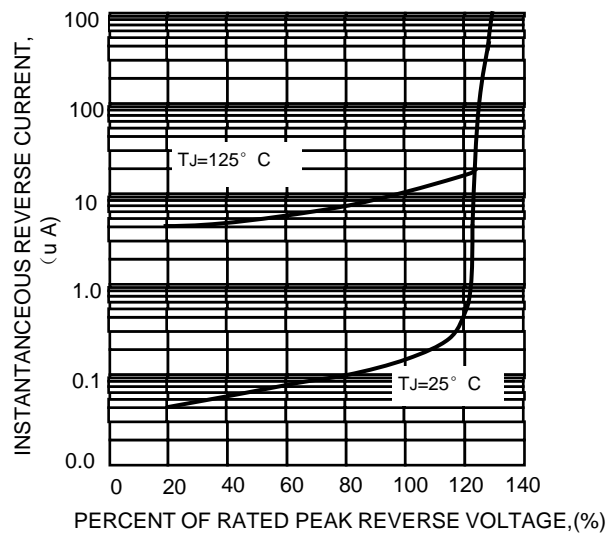
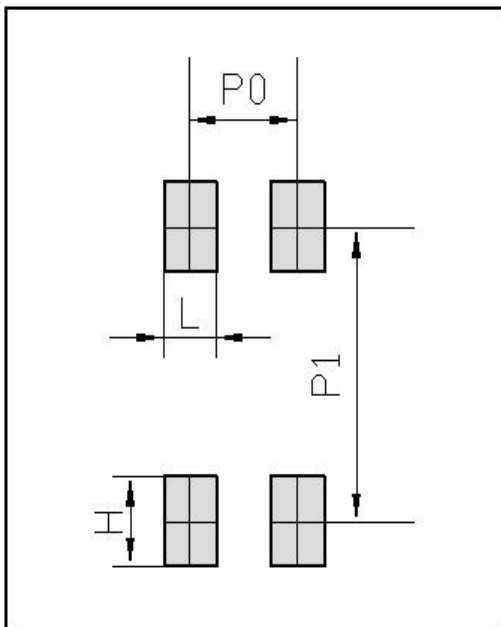


FIG.5-TYPICAL REVERSE CHARACTERISTICS



Ordering Information(Example)

PREFFREN P/N	UNIT WEIGHT(g)	MINIMUM	INNER BOX	OUTER CARTON	DELIVERY MODE
		PACKAGE(pcs)	QUANTITY(pcs)	QUANTITY(pcs)	
MB05F~MB10F	Approximate 0.08	5000	10000	80000	REEL

Suggested pad layout


Dimensions in millimeters

Unit:mm	
DIM	MIN
P0	2.4
P1	6
L	1
H	1.84