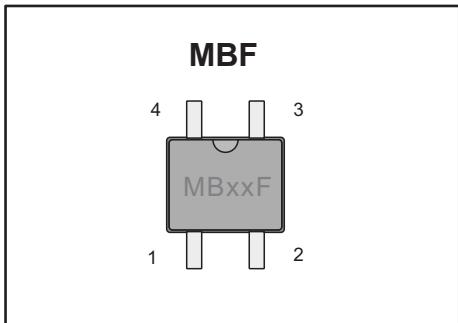


SINGLE PHASE GLASS PASSIVATED BRIDGE RECTIFIERS

Features

PINNING

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



- ◆ 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

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 unless otherwise specified.

Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

Parameter	SYMBOLS	MB1F	MB2F	MB4F	MB6F	MB8F	MB10F	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
Maximum average forward rectified current at $T_C=125^\circ C$	$I_{F(AV)}$	0.8						A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	30						A
Maximum instantaneous forward voltage drop per leg at 0.5A	V_F	1.1						V
Maximum DC reverse current $T_A=25^\circ C$ at rated DC blocking voltage $T_A=100^\circ C$	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 an 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.

Fig.1 Average Rectified Output Current Derating Curve

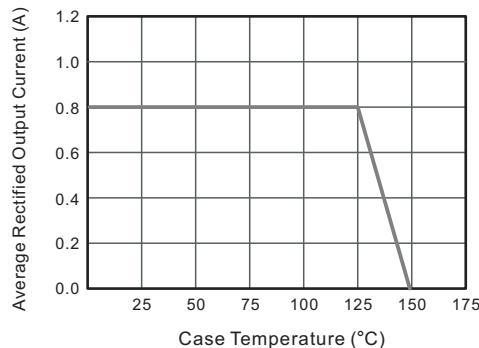


Fig.2 Typical Reverse Characteristics

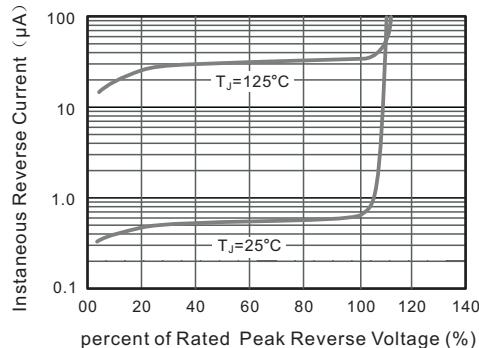


Fig.3 Typical Instantaneous Forward Characteristics

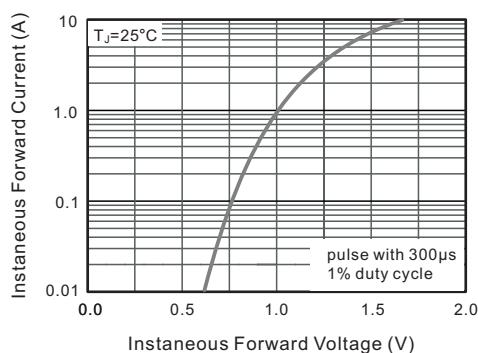


Fig.4 Typical Junction Capacitance

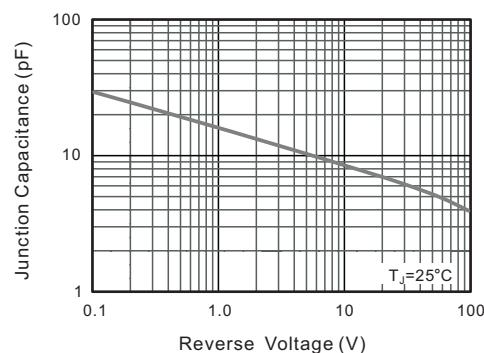
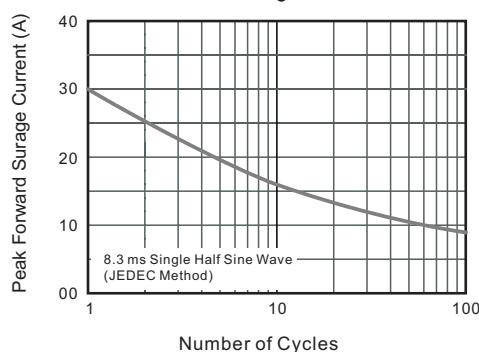


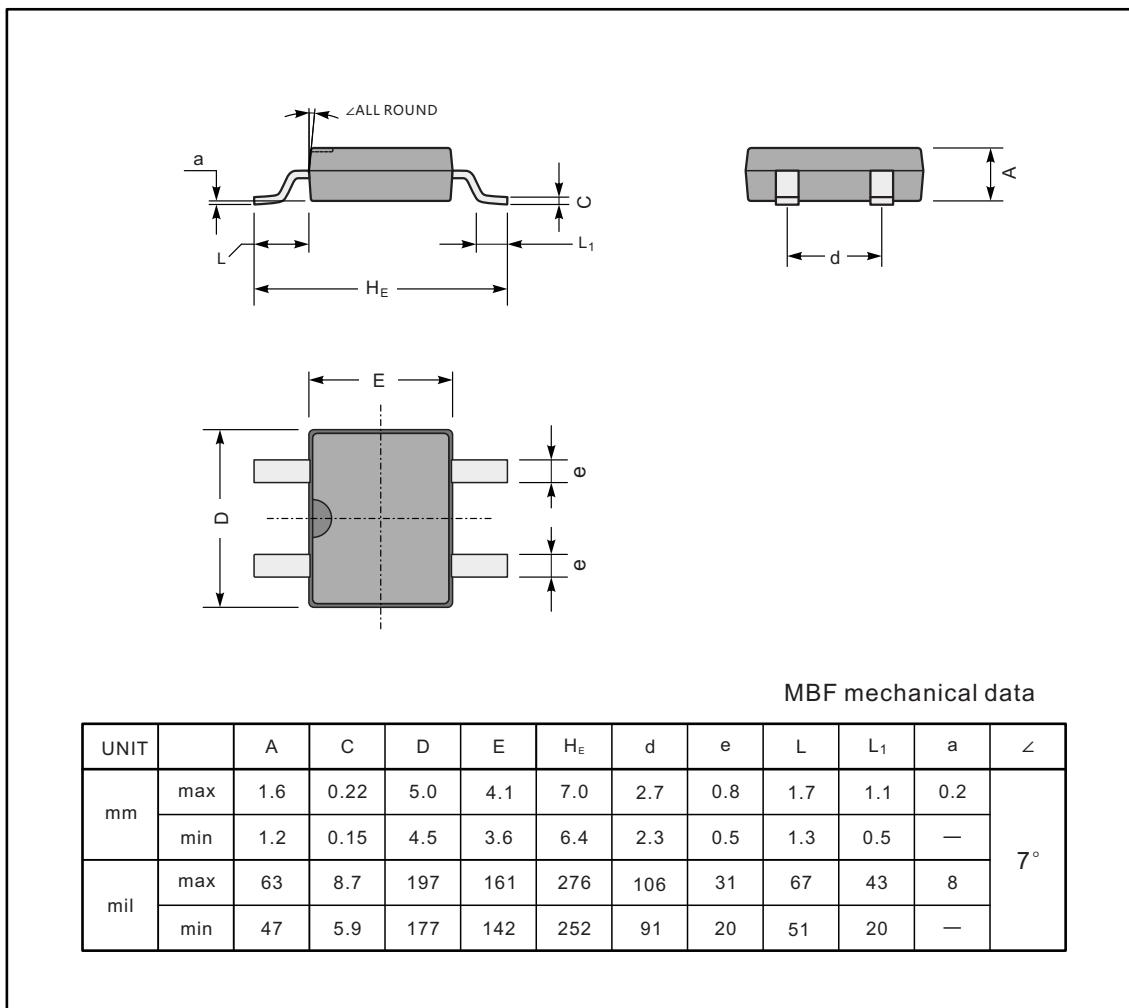
Fig.5 Maximum Non-Repetitive Peak Forward Surge Current



PACKAGE OUTLINE

Plastic surface mounted package; 4 leads

MBF



The recommended mounting pad size

