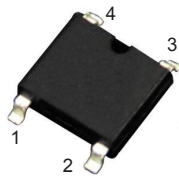


Bridge Rectifier



MBF

PINNING

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

Maximum Ratings and Electrical characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.

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

Features

- Low profile package
- Ideal for automated placement
- Ultrafast reverse recovery time
- Low power losses, high efficiency
- Low forward voltage drop
- High surge capability

Mechanical Date

- **Case:** MBF Molded plastic body over Schottky barrier chips
- **Terminals:** Solder plated, solderable per JESD22-B102
- **Polarity:** Polarity symbols marked on body

Items	Symbol	MB10F	UNIT
Maximum repetitive peak reverse voltage	V_{RRM}	1000	V
Maximum RMS voltage	V_{RMS}	700	V
Maximum DC blocking voltage	V_{DC}	1000	V
Maximum average forward output rectified current at $T_A=30^{\circ}C$	$I_{F(AV)}$	1.0	A
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	30	A
Typical Thermal Resistance (Note1)	$R_{\theta JA}$	90	$^{\circ}C/W$
	$R_{\theta JL}$	30	
Maximum Forward Voltage per leg at 1.0 A	V_F	1.10	V
Maximum DC Reverse Current $T_J=25^{\circ}C$ at Rated DC Blocking Voltage $T_J=125^{\circ}C$	I_R	10	μA
		500	
Operating junction temperature range	T_J	-55 to +150	$^{\circ}C$
Storage temperature range	T_{STG}	-55 to +150	$^{\circ}C$

Note 1: Mounted on glass epoxy PC board with 4×1.5"×1.5" (3.81×3.81 cm) copper pad

RATINGS AND CHARACTERISTICS CURVES (TA = 25 °C unless otherwise noted)

Fig.1 Typical Instantaneous Forward Characteristics

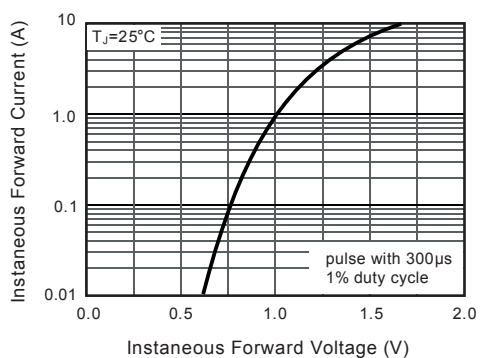


Fig.2 Typical Junction Capacitance

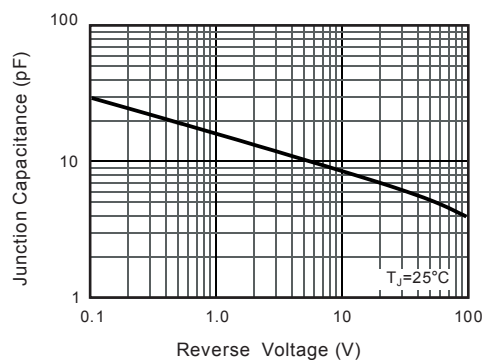


Fig.3 Maximum Non-Repetitive Peak Forward Surge Current

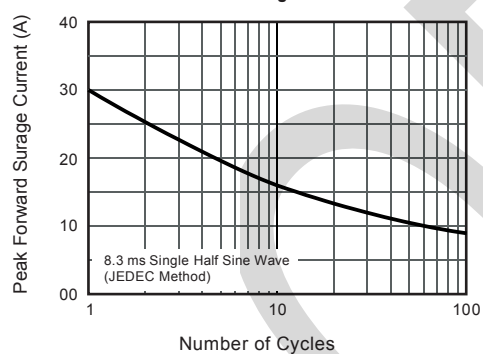
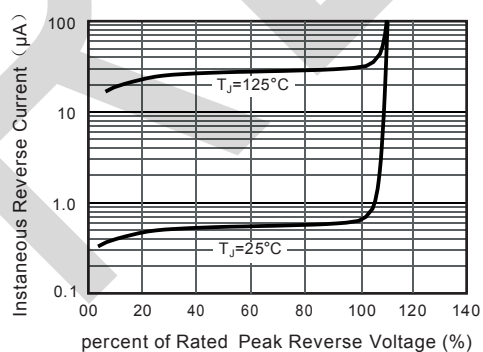
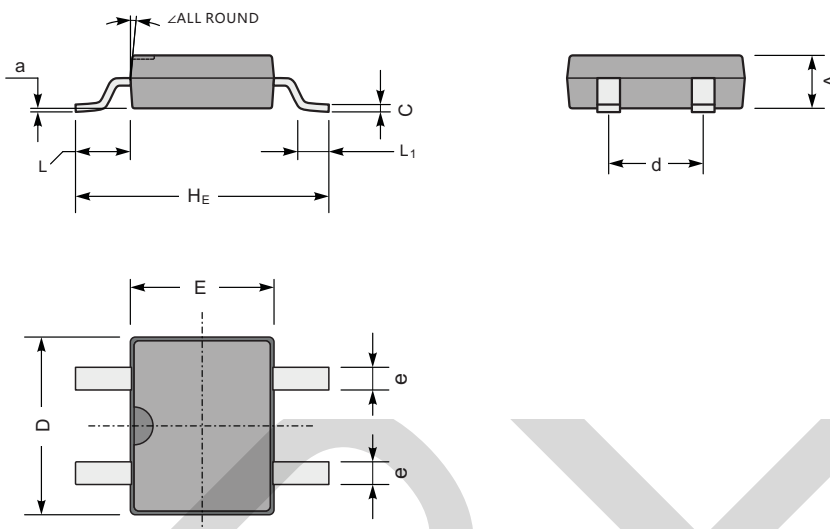


Fig.4 Typical Reverse Characteristics



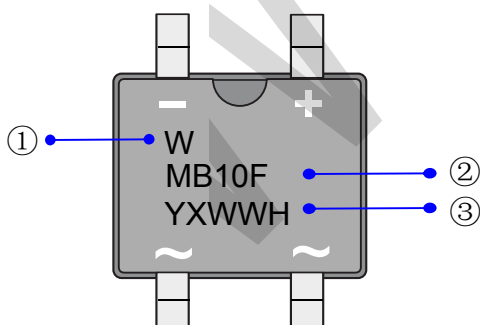
PACKAGE OUTLINE DIMENSIONS



MBF mechanical data

UNIT		A	C	D	E	H_E	d	e	L	L_1	a	$\angle$
mm	max	1.6	0.22	5.0	4.1	7.0	2.7	0.8	1.7	1.1	0.2	7°
	min	1.2	0.15	4.5	3.6	6.4	2.3	0.5	1.3	0.5	—	
mil	max	63	8.7	197	161	276	106	31	67	43	8	
	min	47	5.9	177	142	252	91	20	51	20	—	

Marking Information



①W : Company's trademark

②Product model : MB10F

③PDC information:

Y X WW H

H:Halogen-free

WW:Week code(01 to 53)

X:Internal identification code

Y:Year code(ex:0=2020)