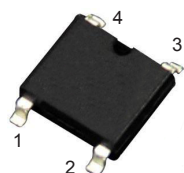


Ultrasoft Recovery Bridge



MBF

PINNING

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

Features

- Ultrasoft recovery
- low I_{RRM}
- low V_F
- High V_{RRM}
- Special frame design for heat dissipation

Benefits

- Reduced EMI
- Reduced power loss and switching transistor
- Reduced snubbing

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 %.

Parameter	Symbols	WRMB10M	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	1000	V
Maximum RMS voltage	V_{RMS}	700	V
Maximum DC Blocking Voltage	V_{DC}	1000	V
Average Rectified Output Current	I_O	1	A
Reverse Recovery Time. $I_F=0.5A, I_R=1A, I_{RR}=0.25A$	T_{rr}	10	us
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	25	A
Maximum Forward Voltage at $@I_F=1A$	V_F	1.28	V
Maximum DC Reverse Current $@T_A=25^\circ C$ at Rated DC Blocking Voltage $@T_A=125^\circ C$	I_R	5 100	μA
Typical Junction Capacitance (Note1)	C_j	13	pF
Operating and Storage Temperature Range	T_j, T_{stg}	-55 ~ +150	°C

Note: 1. Measured at 1MHz and applied reverse voltage of 4 V D.C.

2. 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 Reverse Characteristics

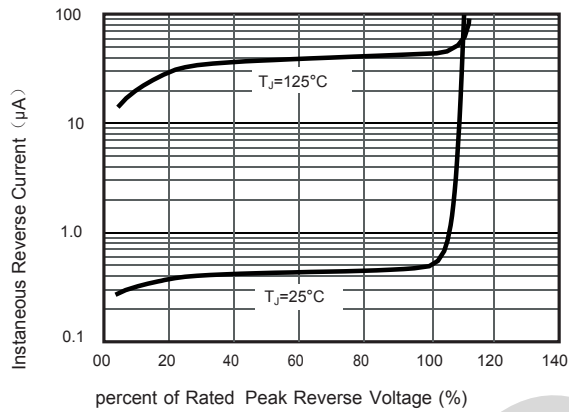


Fig.2 Maximum Non-Repetitive Peak Forward Surge Current

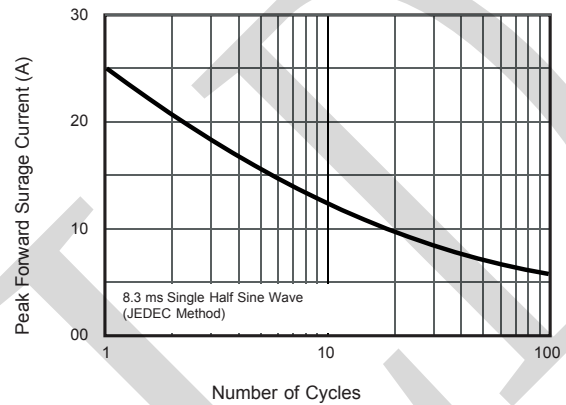


Fig.3 Typical Instantaneous Forward Characteristics

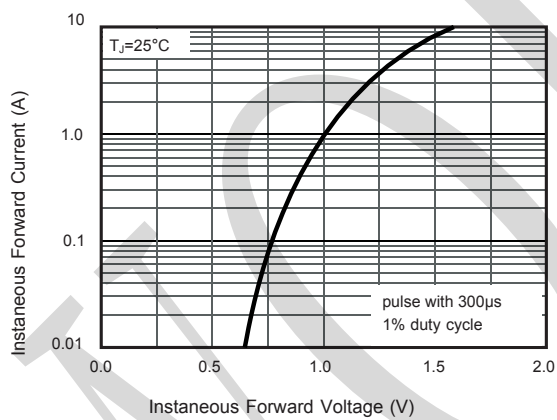
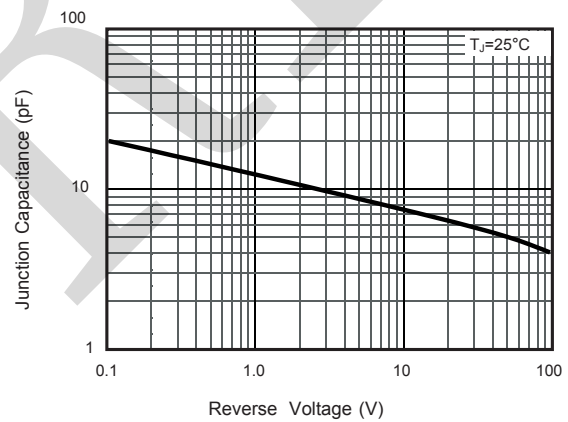
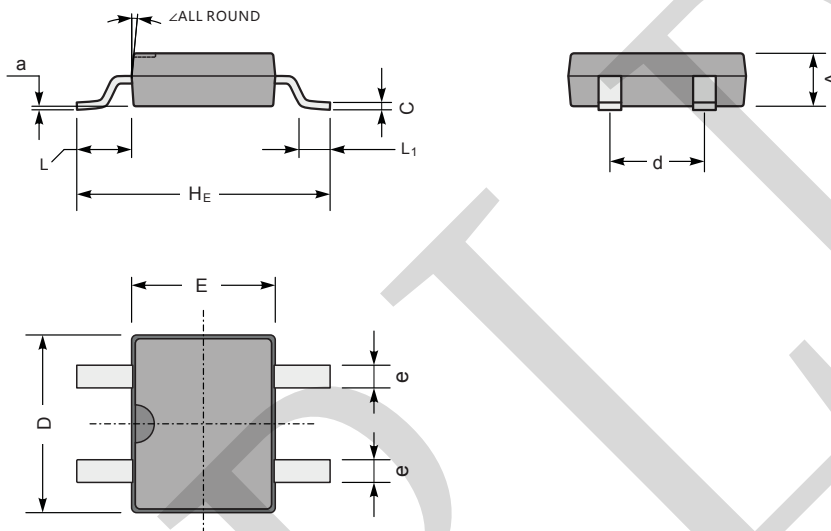


Fig.4 Typical Junction Capacitance



PACKAGE OUTLINE DIMENSIONS

MBF



MBF mechanical data

UNIT		A	C	D	E	H _E	d	e	L	L ₁	a	∠
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	—	