

# MSKSEMI 美森科

SEMICONDUCTOR



ESD



TVS



TSS



MOV



GDT



PLED

## **MBXXXF-MS**

Product specification

FEATURES

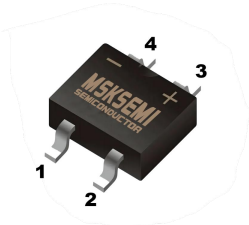
- Reverse Voltage - 40 to 200 V
- Forward Current - 2 A
- High Surge Current Capability
- Designed for Surface Mount Application

MECHANICAL DATA

- Case: MBF
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 75mg 0.0026oz


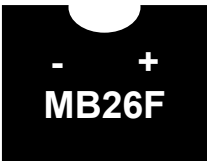
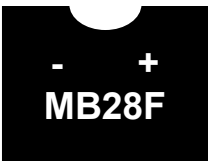
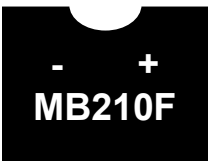

Reference News

PACKAGE OUTLINE



MBF

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

MB24F-MS	MB26F-MS	MB28F-MS	MB210F-MS	MB220F-MS
				

## Maximum Ratings and Electrical characteristics

Ratings at 25 ambient temperature unless otherwise specified.

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

Parameter	Symbols	MB24F-MS	MB26F-MS	MB28F-MS	MB210F-MS	MB220F-MS	Units
Maximum Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	40	60	80	100	200	V
Maximum RMS voltage	V <sub>RMS</sub>	28	42	56	70	140	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	40	60	80	100	200	V
Maximum Average Forward Rectified Current at T <sub>c</sub> = 100 °C	I <sub>F(AV)</sub>	2.0					A
Peak Forward Surge Current ,8 .3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I <sub>FSM</sub>	50		40			A
Max Instantaneous Forward Voltage at 2 A	V <sub>F</sub>	0.55	0.70	0.85			V
Maximum DC Reverse Current at Rated DC Reverse Voltage T <sub>a</sub> = 25°C T <sub>a</sub> =100°C	I <sub>R</sub>	0.5 10			0.3 5		mA
Typical Junction Capacitance <sup>1)</sup>	C <sub>j</sub>	220	80				pF
Typical Thermal Resistance <sup>2)</sup>	R <sub>θJA</sub>	75					°C/W
Operating Junction Temperature Range	T <sub>j</sub>	-55 ~ +150					°C
Storage Temperature Range	T <sub>stg</sub>	-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.

## Typical Characteristics

Fig.1 Forward Current Derating Curve

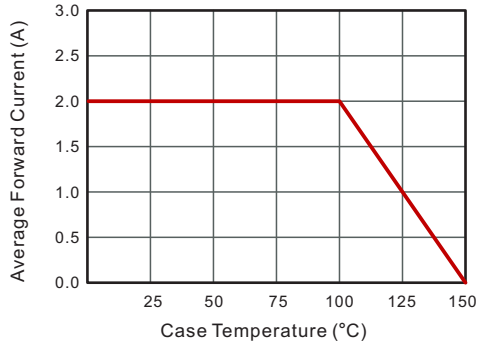


Fig.2 Typical Reverse Characteristics

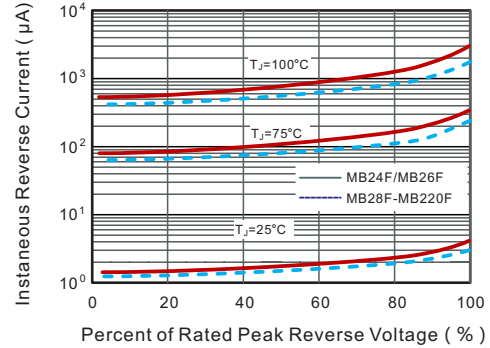


Fig.3 Typical Forward Characteristic

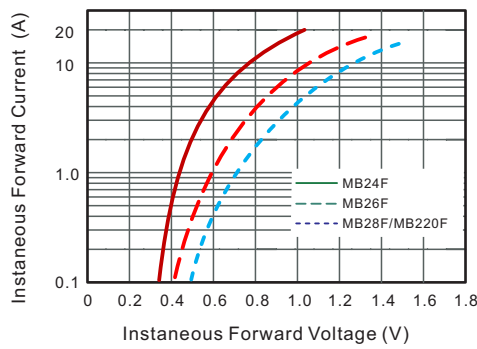


Fig.4 Typical Junction Capacitance

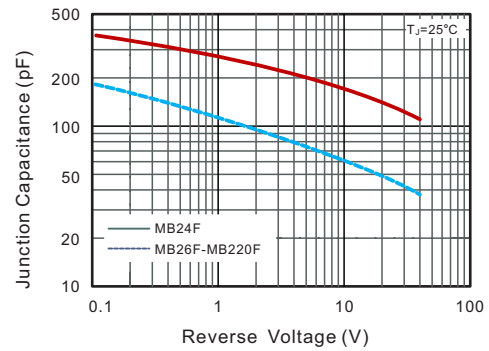


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

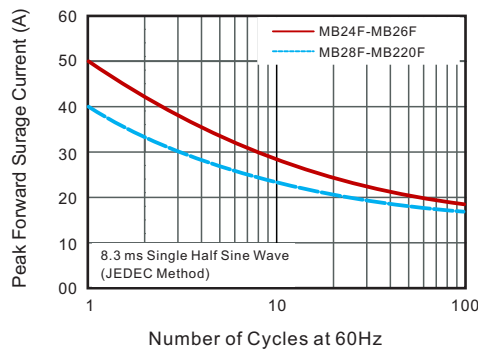
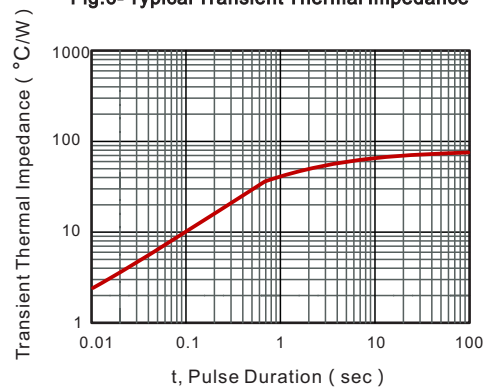
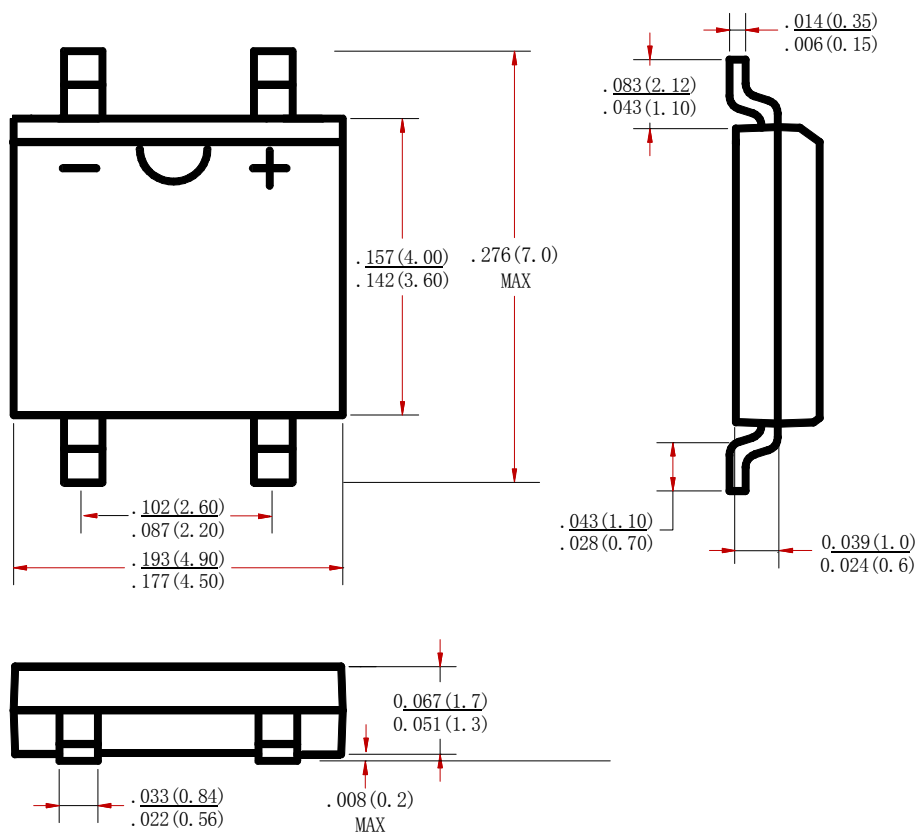


Fig.6- Typical Transient Thermal Impedance

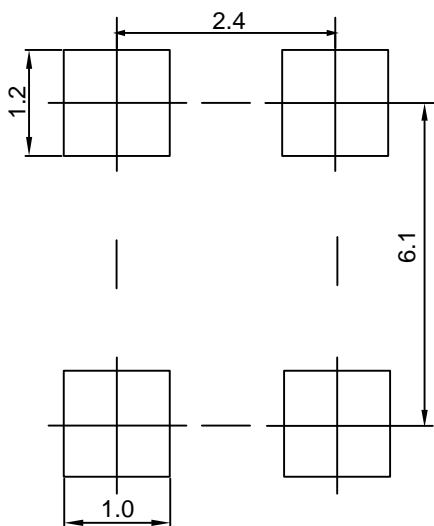


MBF Package Outline Dimensions



Dimensions in inches and (millimeters)

MBF Suggested Pad Layout



**Note:**

1. Controlling dimension: in millimeters.
2. General tolerance:  $\pm 0.05\text{mm}$ .
3. The pad layout is for reference purposes only.

REEL SPECIFICATION

P/N	PKG	QTY
MBXXXF-MS	MBF	5000

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