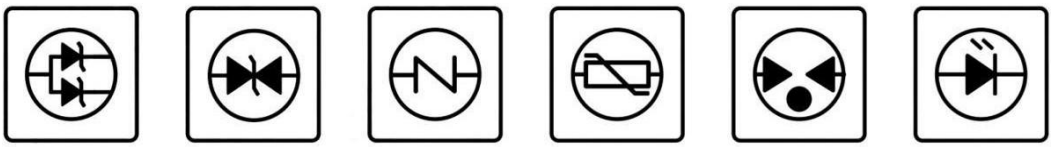
MSKSEMI 美森科
SEMICONDUCTOR



MB14F-MS THRU MB120F-MS

Product specification

MB14F-MS THRU MB120F-MS

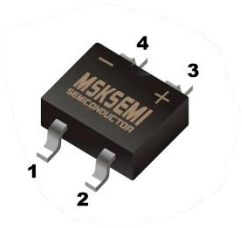
FEATURES

- Reverse Voltage - 40 to 200 V
- Forward Current - 1 A
- High Surge Current Capability
- Designed for Surface Mount Application

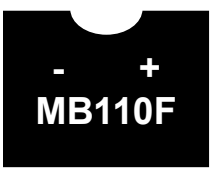
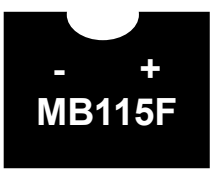
MECHANICAL DATA

- 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 (-)

MB14F-MS	MB16F-MS	MB18F-MS	MB110F-MS	MB115F-MS	MB120F-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	MB14F -MS	MB16F -MS	MB18F -MS	MB110F -MS	MB115F -MS	MB120F -MS	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	40	60	80	100	150	200	V
Maximum RMS voltage	V_{RMS}	28	42	56	70	105	140	V
Maximum DC Blocking Voltage	V_{DC}	40	60	80	100	150	200	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	1.0						A
Peak Forward Surge Current,8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	40			30			A
Max Instantaneous Forward Voltage at 1 A	V_F	0.55	0.70		0.85	0.90		V
Maximum DC Reverse Current T_a = 25°C at Rated DC Reverse Voltage T_a =100°C	I_R	0.3 10			0.2 5	0.1 2		mA
Typical Junction Capacitance [1]	C_j	110	80					pF
Typical Thermal Resistance [2]	$R_{\theta JA}$	100						°C/W
Operating Junction Temperature Range	T_j	-55 ~ +125						°C
Storage Temperature Range	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.

Fig.1 Forward Current Derating Curve

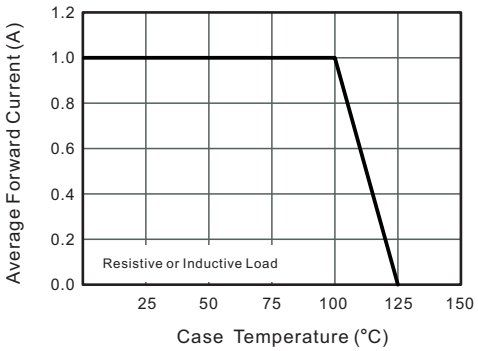
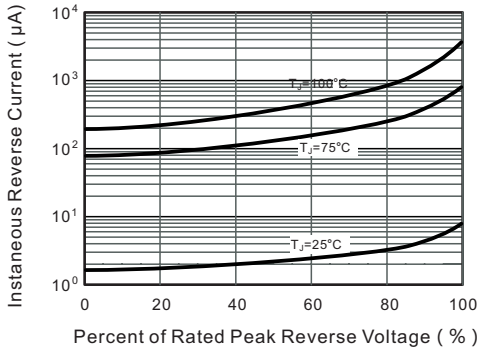


Fig.2 Typical Reverse Characteristics



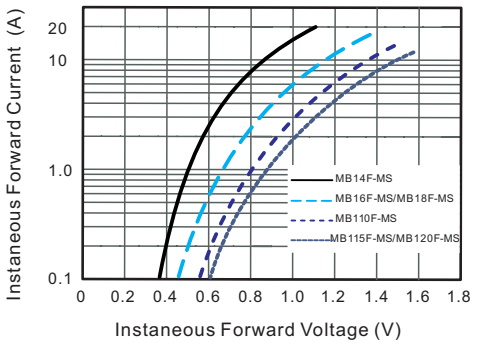


Fig.4 Typical Junction Capacitance

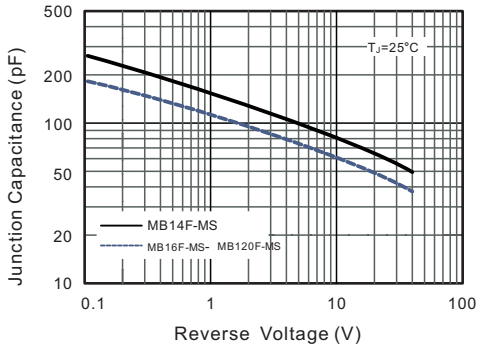


Fig.5 Maximum Non-Repetitive Peak Forward Surage Current

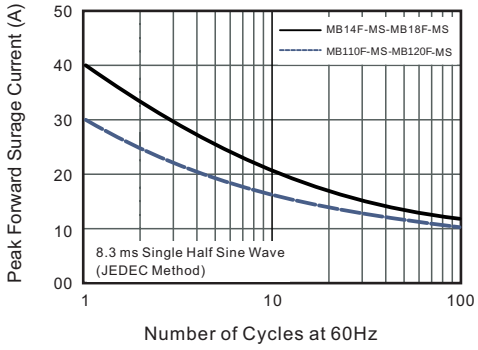
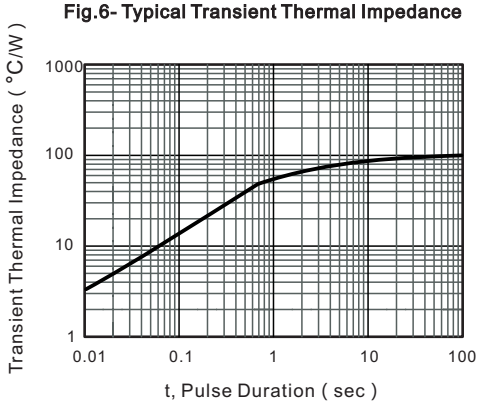
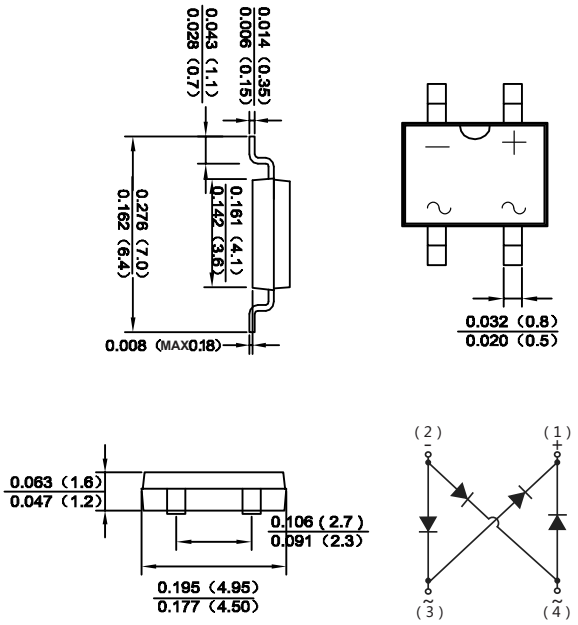


Fig.6- Typical Transient Thermal Impedance

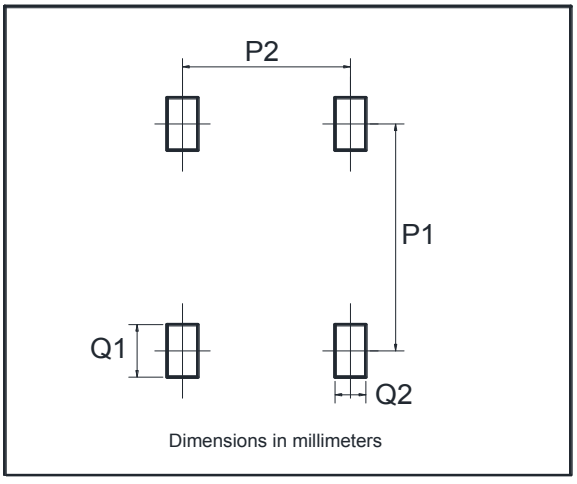


MBF



Dimensions in inches and (millimeters)

Suggested Pad Layout



Dim	Min
P1	6.00
P2	2.40
Q1	1.84
Q2	1.20

REEL SPECIFICATION

P/N	PKG	QTY
MB14F-MS THRU MB120F-MS	MBF	5000

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