

MB24F THRU MB220F

Surface Mount Schottky Bridge Rectifier
Reverse Voltage - 40 to 200 V
Forward Current - 2 A

Features

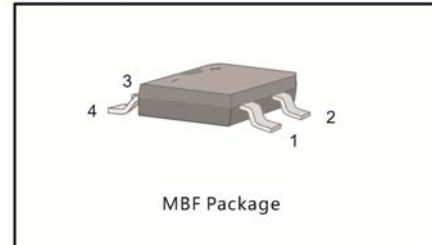
- Glass passivated chip junction
- High Surge Current Capability
- Designed for Surface Mount Application

Mechanical Data

- Case: Molded plastic, MBF
- Terminals: solderable per MIL-STD-750, Method 2026

PINNING

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



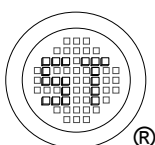
Absolute Maximum Ratings and Characteristics

Ratings at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Parameter	Symbols	MB24F	MB26F	MB28F	MB210F	MB220F	Units
	Marking	MB24F	MB26F	MB28F	MB210F	MB220F	-
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	40	60	80	100	200	V
Maximum RMS Voltage	V _{RMS}	28	42	56	70	140	V
Maximum DC Blocking Voltage	V _{DC}	40	60	80	100	200	V
Average Rectified Output Current	I _{F(AV)}	2					A
Peak Forward Surge Current 8.3 ms Single Half-sine-wave Superimposed on Rated Load (JEDEC Method)	I _{FSM}	50					A
Maximum Forward Voltage at 2 A	V _F	0.55	0.7	0.85			V
Maximum DC Reverse Current at Rated DC Blocking Voltage at T _a = 25°C DC Blocking Voltage at T _a = 100°C	I _R	0.5 10			0.3 5		mA
Typical Junction Capacitance ¹⁾	C _J	220	80				pF
Typical Thermal Resistance ²⁾	R _{θJA}	115					°C/W
Junction Temperature	T _j	- 55 to + 125					°C
Storage Temperature Range	T _{stg}	- 55 to + 150					°C

¹⁾ Measured at 1 MHz and applied reverse voltage of 4 V.

²⁾ Mounted on glass epoxy PC board with 1.3 mm² copper pad.



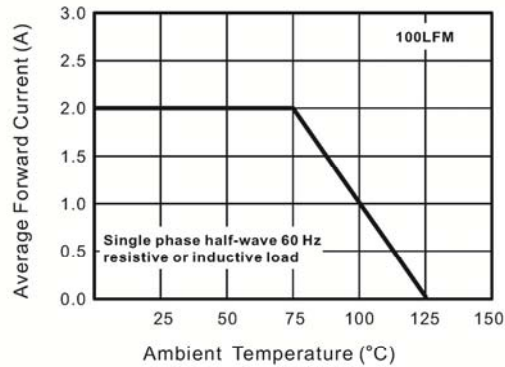
SEMTECH ELECTRONICS LTD.



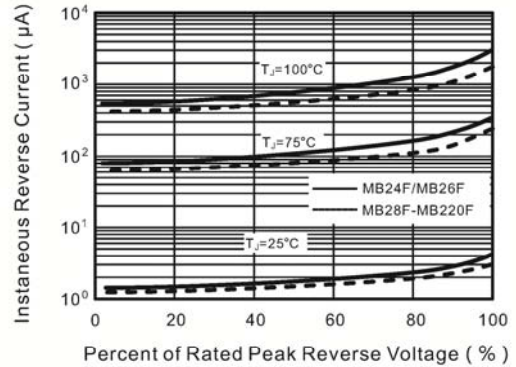
Dated :26/08/2015 JD Rev: 03

MB24F THRU MB220F

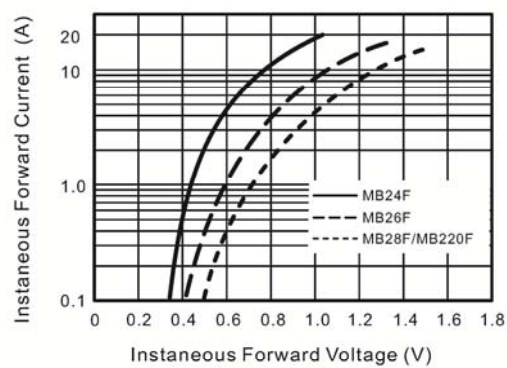
Forward Current Derating Curve



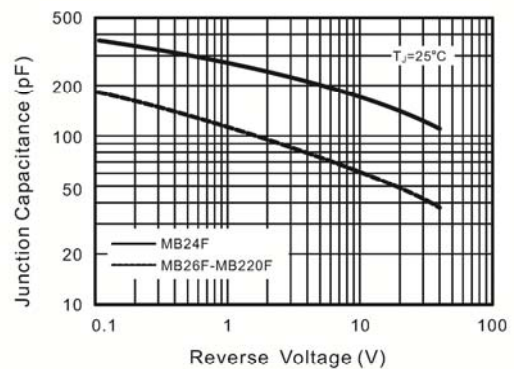
Typical Reverse Characteristics



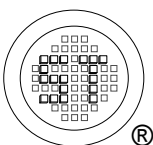
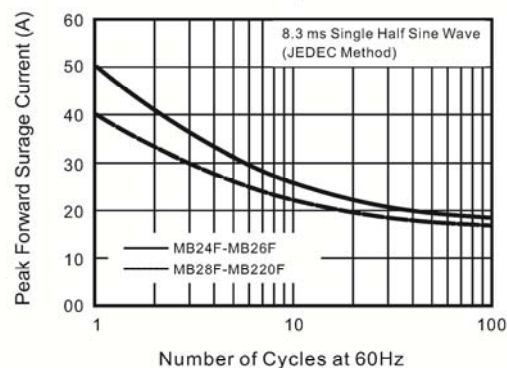
Typical Forward Characteristic



Typical Junction Capacitance



Maximum Non-Repetitive Peak Forward Surge Current



SEMTECH ELECTRONICS LTD.



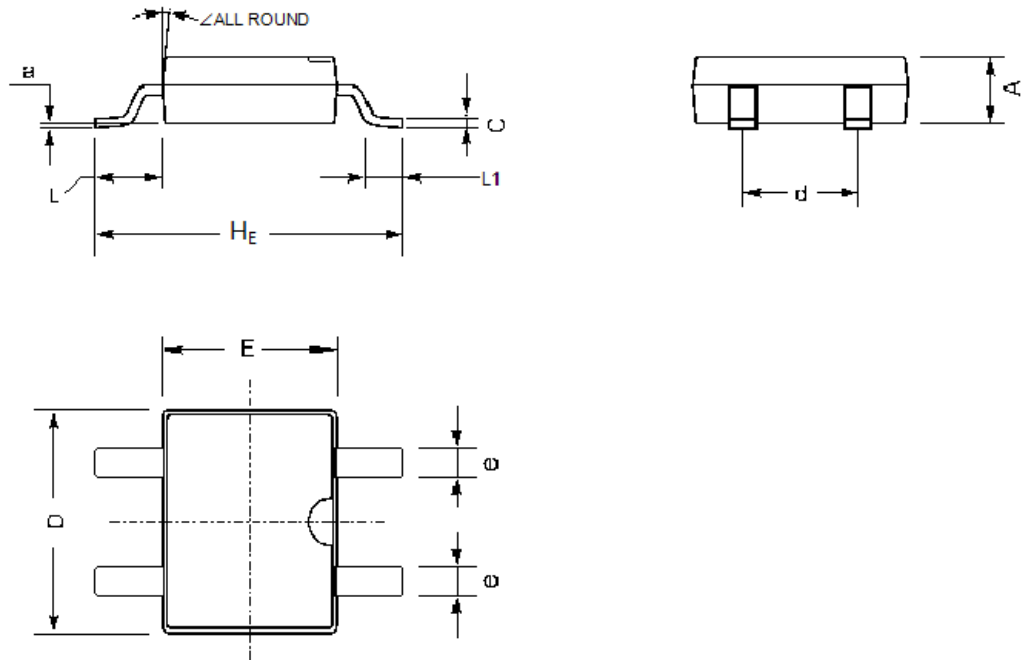
Dated :26/08/2015 JD Rev: 03

MB24F THRU MB220F

PACKAGE OUTLINE

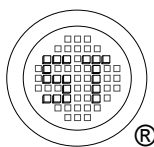
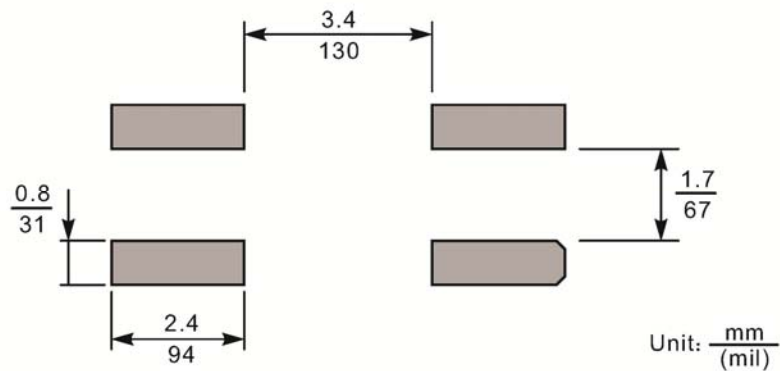
MBF

Plastic surface mounted package; 4 leads



UNIT	A	C	D	E	H _E	d	e	L	L1	a	∠
mm	1.6	0.22	5	4.1	7	2.7	0.7	1.7	1.1	0.2	7°
	1.2	0.15	4.5	3.6	6.4	2.3	0.5	1.3	0.5	0	

Recommended Soldering Footprint



SEMTECH ELECTRONICS LTD.



Dated :26/08/2015 JD Rev: 03