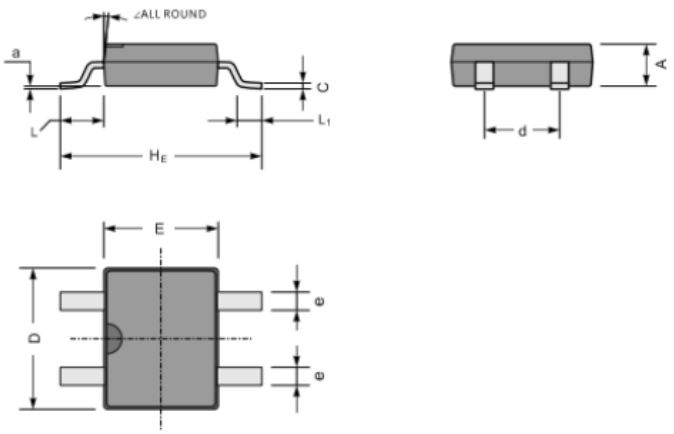
SMD Schottky Bridge

Primary characteristics		
Parameter	**Value**	**Unit**
Maximum Repetitive Peak Reverse Voltage	40 ~ 200	V
Maximum Average Forward Rectified Current	1.0	A

Features

- **MBF** case for easy automatic insertion
- Pb-free and **RoHS** compliant
- High current capability
- Low forward voltage drop
- Low power loss, high efficiency
- Solderable per MIL-STD-750, Method 2026

Case dimensions



MBF

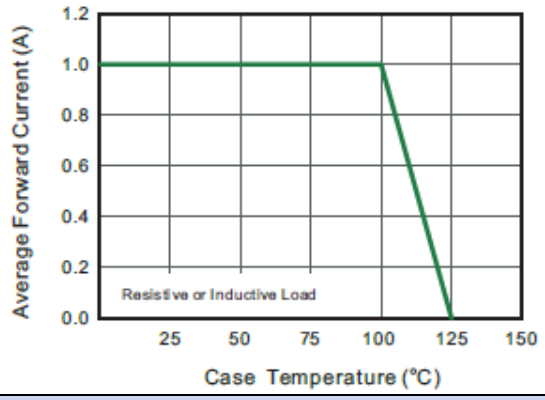
Unit	A	C	D	E	H_E	d	e	L	L_1	a
mm	1.2 ±0.4	0.22 ±0.07	5.0 ±0.5	4.1 ±0.5	7.0 ±0.6	2.7 ±0.5	0.7 ±0.3	1.7 ±0.5	1.1 ±0.5	0.20

Absolute maximum ratings and general electrical characteristics (T_a = 25°C)

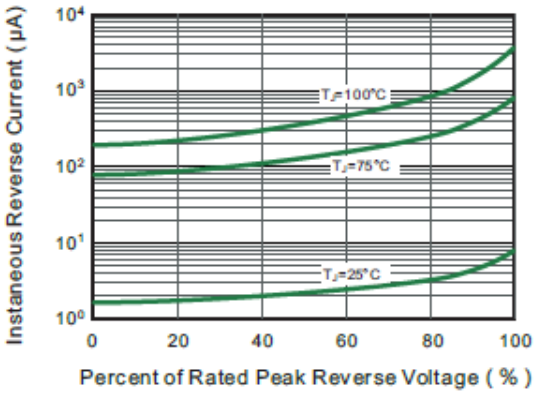
Parameter		Symbol	Value					Unit
			MB14F	MB16F	MB18F	MB110F	MB120F	
Maximum repetitive peak reverse voltage		V_{RRM}	40	60	80	100	200	V
Maximum RMS voltage		V_{RMS}	28	42	56	70	140	V
Maximum DC blocking voltage		V_{DC}	40	60	80	100	200	V
Average rectified output current		$I_{F(AV)}$	1.0					A
Peak forward surge current 8.3mS single half sine wave superimposed on rated load (JEDEC method)		I_{FSM}	40		30			A
Maximum instantaneous forward voltage @2.0A		V_F	0.55	0.7	0.85	0.90		V
Maximum DC reverse current at rated DC blocking voltage	T_a=25°C	I_R	0.3		0.2	0.1		µA
	T_a=100°C		10		5	2.0		µA
Typical junction capacitance [1]		C_j	110	80				pF
Typical thermal resistance [2]		$R_{\theta JA}$	100					°C/W
Operating temperature range		T_j	-55 ~ 125					°C
Storage temperature range		T_{stg}	-55 ~ 150					°C

1) Measured at 1.0MHz and applied reverse voltage of 4.0VDC
2) Mounted on glass epoxy PC board with 4x 1.5" x 1.5" (3.81x3.81cm) copper pad

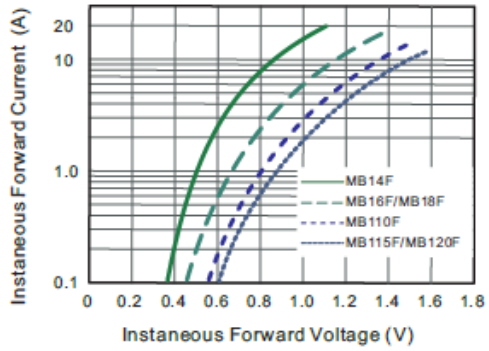
Forward current derating curve



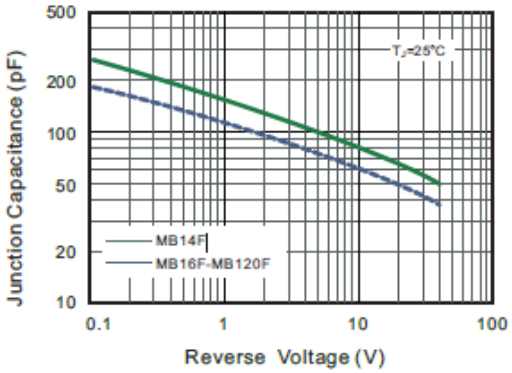
Typical reverse characteristics



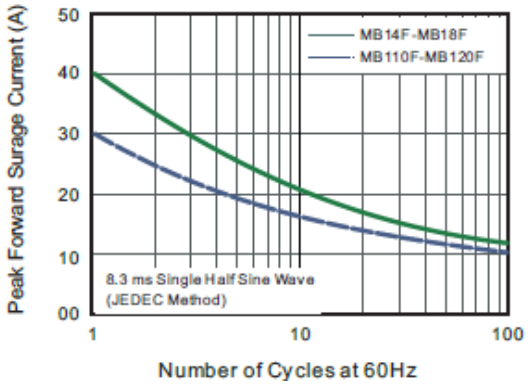
Typical forward characteristic



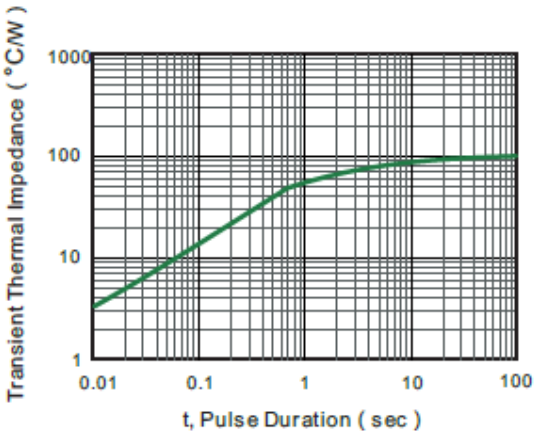
Typical junction capacitance

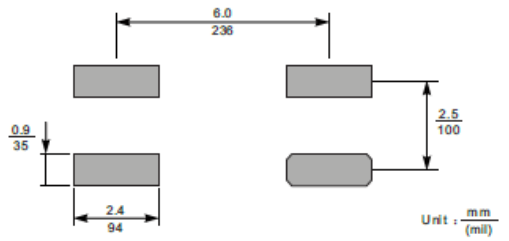


Maximum non-repetitive peak forward surge current



Typical transient thermal impedance



Suggested soldering pad layout

MBF

Ordering information			
Part Number	**Package**	**Shipping Quantity**	**Dimensions**
MB14F ~ MB120F	MBF	**5000 pcs / 13" reel**	---

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