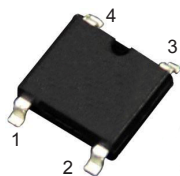


Surface Mount Flat Schottky Bridge Rectifier



MBF

PINNING

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

Features

- Low profile package
- Ideal for automated placement
- Ultrafast reverse recovery time
- Low power losses, high efficiency
- Low forward voltage drop
- High surge capability

Mechanical Data

- **Case:** MBF Molded plastic body over Schottky barrier chips
- **Terminals:** Solder plated, solderable per JESD22-B102
- **Polarity:** Polarity symbols marked on body

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	KMB210F	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	100	V
Maximum RMS voltage	V_{RMS}	70	V
Maximum DC Blocking Voltage	V_{DC}	100	V
Average Rectified Output Current	I_O	2.0	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 $@I_F = 2.0A$	V_F	0.85	V
Maximum DC Reverse Current $@T_A = 25^\circ C$ at Rated DC Blocking Voltage $@T_A = 125^\circ C$	I_R	0.5 20	mA
Thermal resistance from junction to ambient per leg(1)	$R_{\theta JA}$	85	$^\circ C/W$
Operating and Storage Temperature Range	T_j, T_{stg}	-55 ~ +125	$^\circ C$

Note: 1. Units mounted on P.C.B. with 0.5×0.5*(13×13mm) pads

2. Pulse test: 300μs pulse width, 1% duty cycle.

RATINGS AND CHARACTERISTICS CURVES (TA = 25 °C unless otherwise noted)

Fig.1 Forward Current Derating Curve

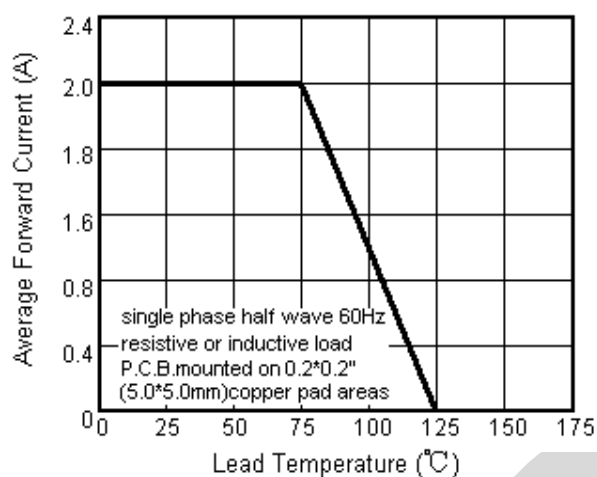


Fig.2 Maximum Non-Repetitive Peak Forward Surge Current

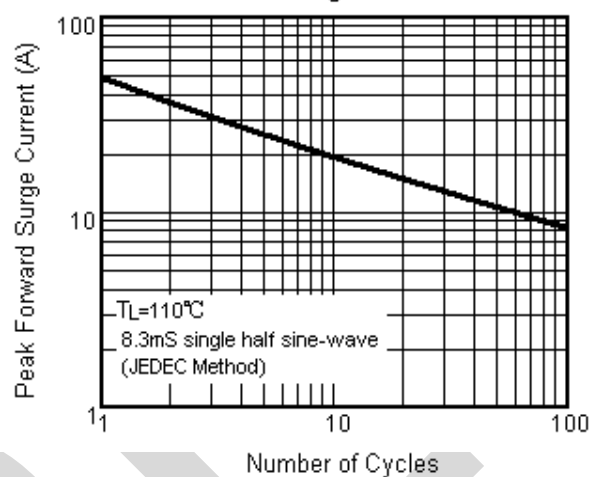


Fig.3 Typical Instantaneous Forward Characteristics

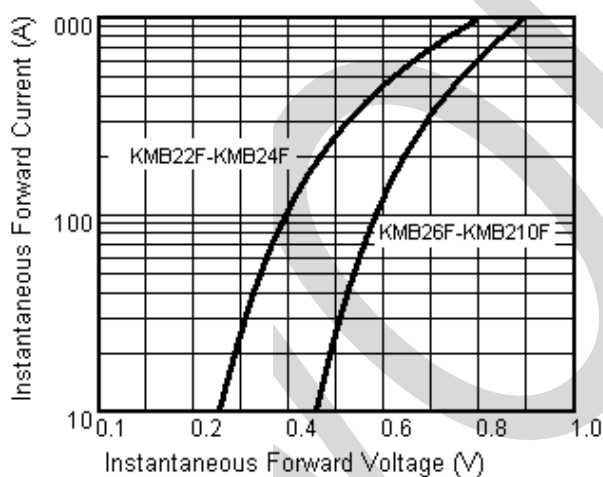
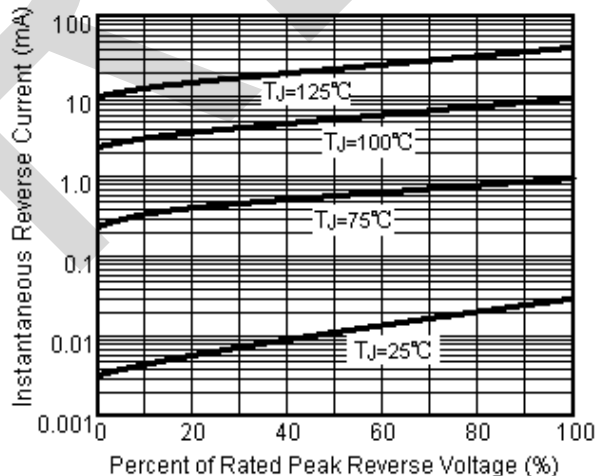
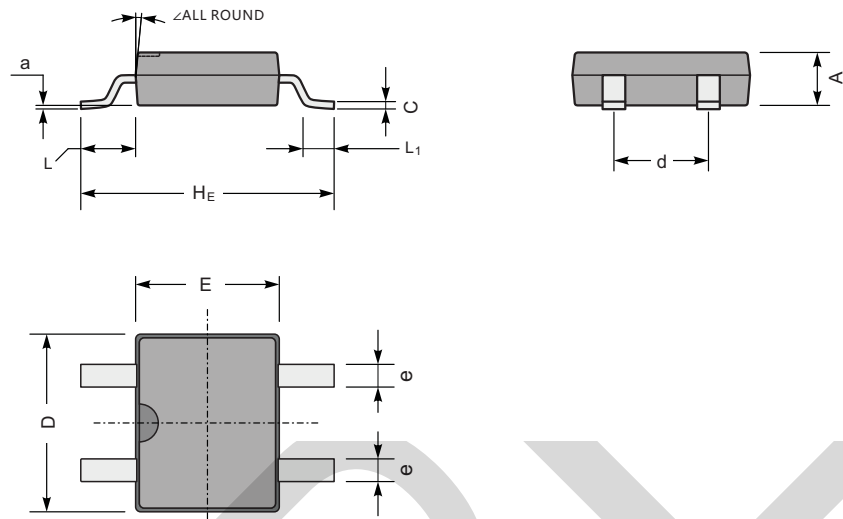


Fig.4 Typical Reverse Characteristics



PACKAGE OUTLINE DIMENSIONS



MBF mechanical data

UNIT		A	C	D	E	HE	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	—	