KMB12F-KMB110F

SCHOTTKY SURFACE MOUNT FLAT BRIDGE RECTIFIER

VOLTAGE RANGE: 20 - 100V
CURRENT: 1.0 A

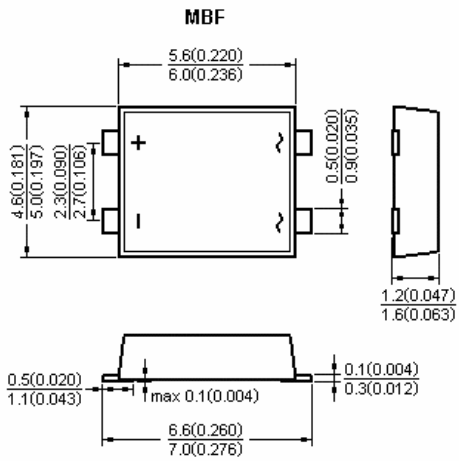
Features

- Lowprofilepackage
- Idealforautomatedplacement
- Ultrafast reverserecovery time
- Lowpowerlosses, highefficiency
- Lowforwardvoltagedrop
- Highsurgecapability
- High temperaturesoldering!
  260℃/10 secondsat terminals

Mechanical Data

- Case:MBFmoldedplasticbodyover Schottkybarrierchips

RoHS COMPLIANT



Dimensions in millimeters and (inches)

Maximum Ratings and Electrical Characteristics

T_A = 25°C unless otherwise specified

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

	Symbol	KMB12F	KMB14F	KMB16F	KMB18F	KMB110F	UNIT
Maximum repetitive peak reverse voltage	V_{RRM}	20	40	60	80	100	V
Maximum RMS voltage	V_{RMS}	14	28	42	56	70	V
Maximum DC blocking voltage	V_{DC}	20	40	60	80	100	V
Maximum average forward rectified current 0.2×0.2"(5.0×5.0mm)copper pad area	$I_{F(AV)}$	1.0					A
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load	I_{FSM}	30					A
Maximum instantaneous forwad voltage at 1.0A	V_F	0.50	0.55	0.70	0.85		V
Maximum DC reverse current T_A = 25 ℃ at Rated DC blocking voltage T_A = 100℃	I_R	0.5 20					mA
Typical Junction Capacitance at 4.0V,1.0MHz	C_J	250			125		pF
Typical Thermal resistance (Note1)	$R_{\theta JA}$ $R_{\theta JL}$	85 20					℃/ W
Operating junction temperature range	T_J	–55 to +125					℃
Storage temperature range	T_{STG}	– 55 to +150					℃

Note：1.Thermal resistance from junction to ambient and from junction to lead P.C.B.mounted on 0.2×0.2"(5.0×5.0mm)copper pad areas.

Fig.1 Forward Current Derating Curve

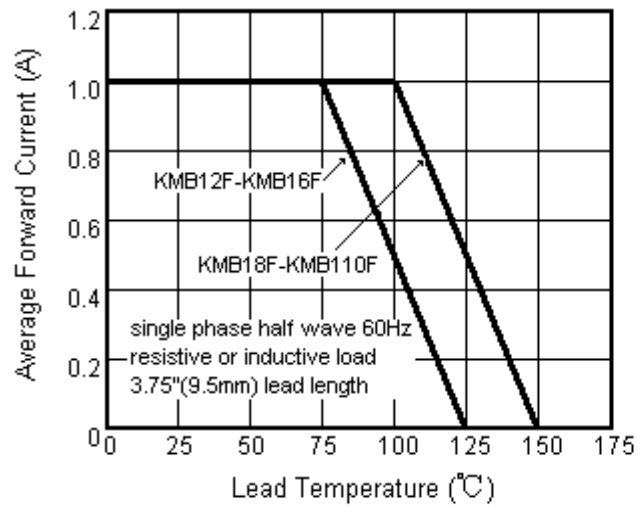


Fig.2 Maximum Non-Repetitive Peak Forward Surge Current

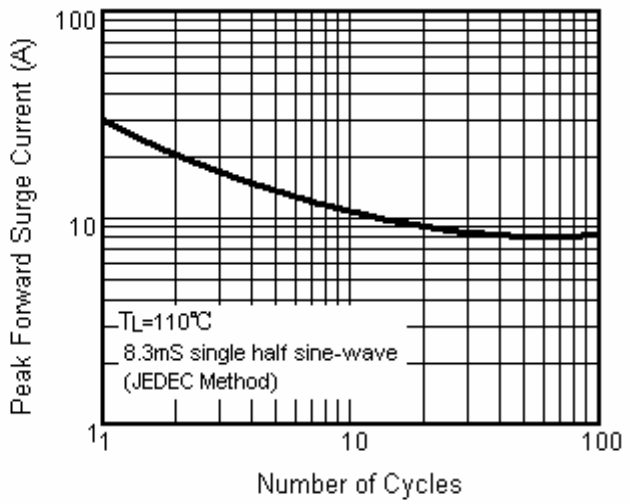


Fig.3 Typical Instantaneours Forward Characteristics

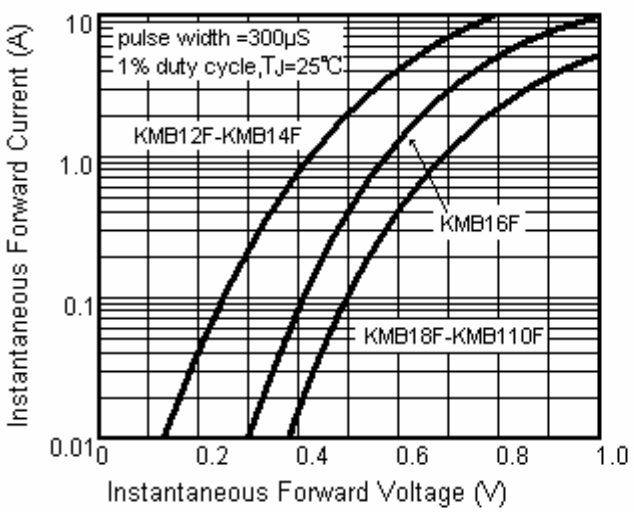


Fig.4A Typical Reverse Characteristics

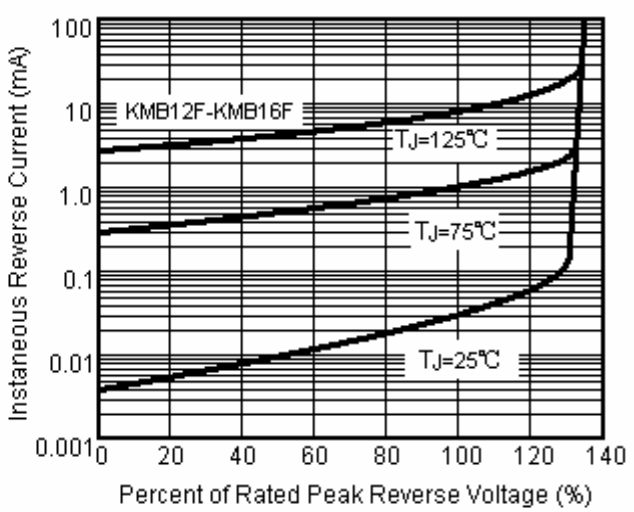


Fig.5 Typical Junction Capacitance

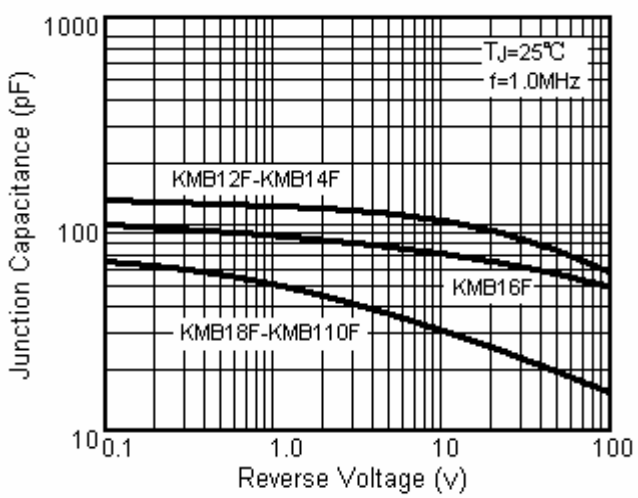


Fig.4B Typical Reverse Characteristics