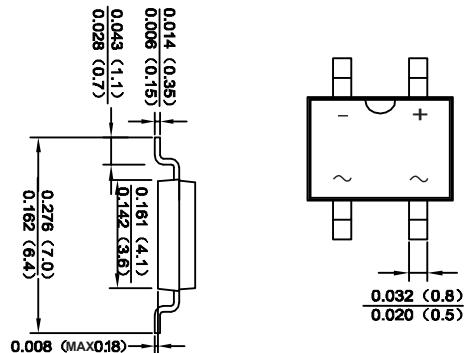




## Schottky Surface Mount Flat Bridge Rectifier

Features

- ◆ Surge overload rating: 30 amperes peak
- ◆ Ideal for printed circuit board
- ◆ Plastic material has Underwriters Laboratory Flammability Classification 94V-0
- ◆ Low leakage
- ◆ Reliable low cost construction utilizing molded

Mechanical Data

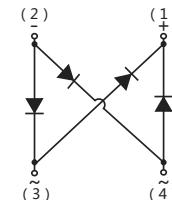
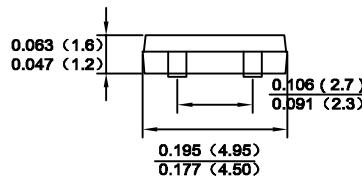
Case : JEDEC MBF Molded plastic body

Terminals : Solder plated, solderable per MIL-STD-750, Method 2026

Polarity : Polarity symbol marking on body

Mounting Position : Any

Weight : 0.0026 ounce, 0.075 grams

Maximum Ratings And Electrical Characteristics

Dimensions in inches and (millimeters)

Ratings at 25°C ambient temperature unless otherwise specified.

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

Parameter	SYMBOLS	MDD KMB14F	MDD KMB16F	MDD KMB18F	MDD KMB110F	MDD KMB115F	MDD KMB120F	UNITS
Marking Code								
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	40	60	80	100	150	200	V
Maximum RMS voltage	V <sub>RMS</sub>	28	42	56	70	105	140	V
Maximum DC blocking voltage	V <sub>DC</sub>	40	60	80	100	150	200	V
Maximum average forward rectified current	I <sub>F(AV)</sub>				1.0			A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>				30			A
Maximum instantaneous forward voltage per at 1A	V <sub>F</sub>	0.55	0.70	0.85	0.90			V
Maximum DC reverse current      T <sub>A</sub> =25°C at rated DC blocking voltage      T <sub>A</sub> =100°C	I <sub>R</sub>	0.3 10		0.2 5		0.1 2		mA
Typical thermal resistance (NOTE1)	R <sub>θJA</sub> R <sub>θJL</sub>			100 20				°C/W
Typical junction capacitance	C <sub>J</sub>	110		80				pF
Operating temperature range	T <sub>J</sub>			-55 to +125				°C
Storage temperature range	T <sub>STG</sub>			-55 to +150				°C

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.



## Ratings And Characteristic Curves

Fig.1 Forward Current Derating Curve

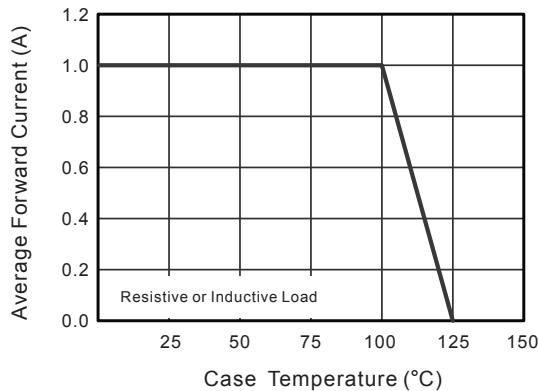


Fig.2 Typical Reverse Characteristics

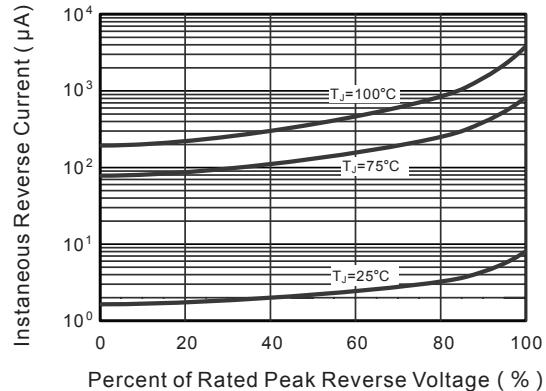


Fig.3 Typical Forward Characteristic

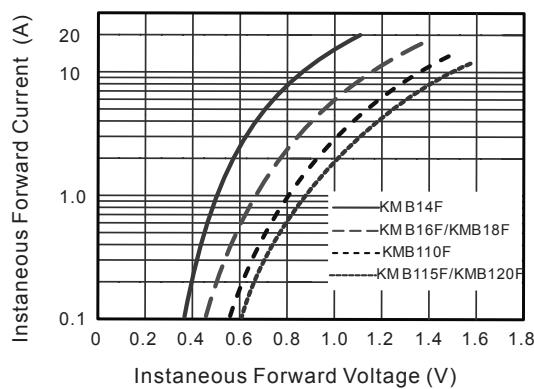


Fig.4 Typical Junction Capacitance

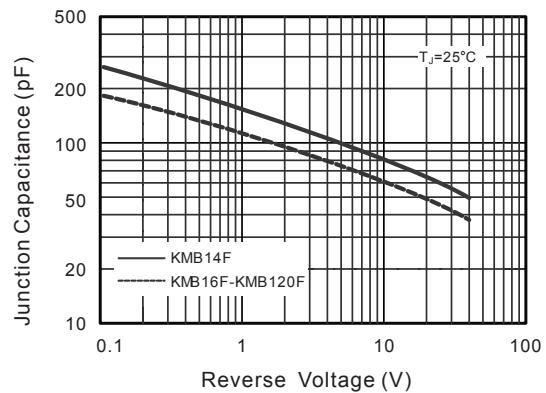


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

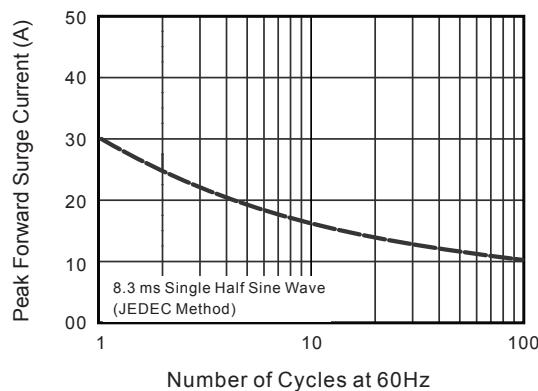
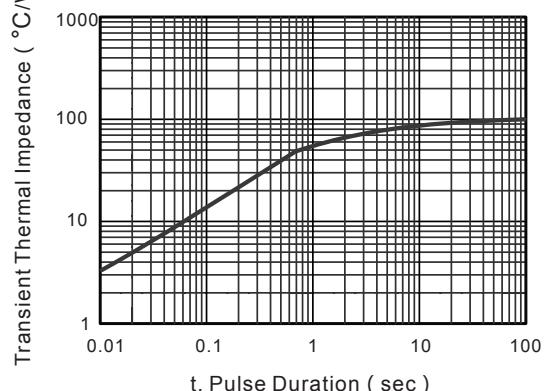


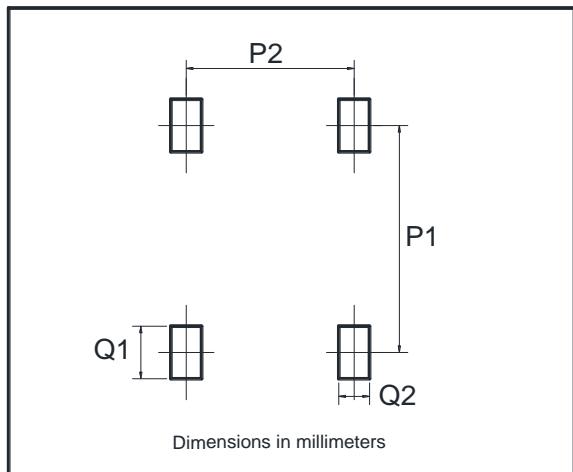
Fig.6-Typical Transient Thermal Impedance



The curve above is for reference only.



## Suggested Pad Layout



Dim	Min
P1	6.00
P2	2.40
Q1	1.84
Q2	1.20