KMB22F THRU KMB225F

Single Phase 2.0AMP Surface Mount Schottky Bridge Rectifier

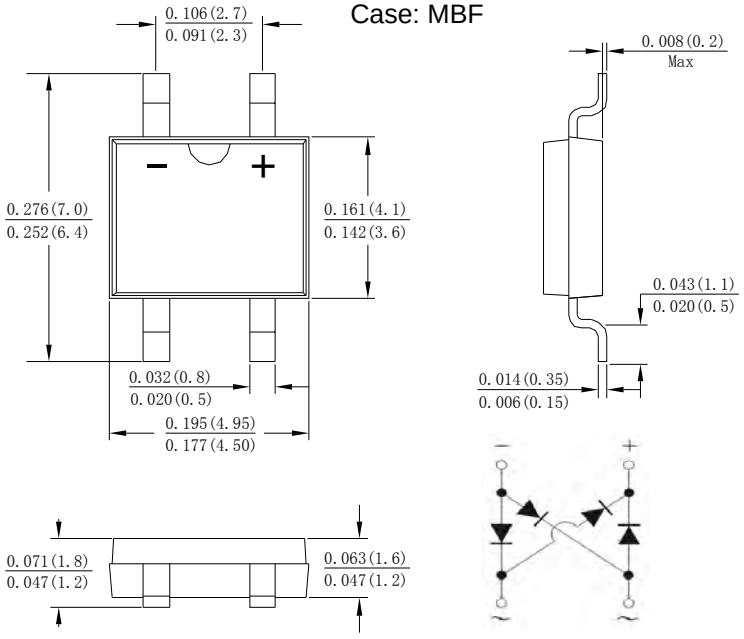
Features

- Schottky Brrier Chip
- Low Power Loss,High Efficiency
- Ideally Suited for Automatic Assembly
- Surge Overload Rating to 50A Peak
- Plastic Case Material has UL Flammability Classification Rating 94V-0

Mechanical Data

- Case: MB-F, molded plastic
- Terminals: plated leads solderable per MIL-STD-202, Method 208
- Polarity: as marked on case
- Mounting position: Any
- Marking: type number
- Lead Free: For RoHS / Lead Free Version,

Case: MBF



dimensions in inches and (millimeters)

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%.

TYPE NUMBER	SYMBOL	KMB 22F	KMB 23F	KMB 24F	KMB 245F	KMB 25F	KMB 26F	KMB 28F	KMB 210F	KMB 215F	KMB 220F	KMB 225F	UNITS
Peak Repetitive Reverse Voltage	V_{RRM}	20	30	40	45	50	60	80	100	150	200	250	V
RMS Reverse Voltage	$V_{R(RMS)}$	14	21	28	31	35	42	56	70	105	140	175	
DC Blocking Voltage	V_{DC}	20	30	40	45	50	60	80	100	150	200	250	
Average Rectified Output Current (Note1) @T_C= 100°C	IF(AV)	2.0											A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	50											A
I^2t Rating for Fusing (t < 8.3ms)	I^2t	10.375											A^2s
Forward Voltage per element @I_F =2.0A	V_{FM}	0.55				0.7		0.85		0.90		0.92	V
Peak Reverse Current @T_J = 25°C	I_{RM}	0.1						0.05					mA
At Rated DC Blocking Voltage @T_J = 100°C		10						5					
Typical Junction Capacitance (Note2)	C_j	100						50					pF
Typical Thermal Resistance	$R_{\theta JL}$	16											°C/W
Operating junction temperature range	T_J	-55 to +150											°C
Operating and Storage Temperature Range	T_{STG}	-55 to +150											°C

Note:

1. Mounted on aluminum substrate PC board with 1.3mm^2 solder pad.
2. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.

KMB22F THRU KMB225F

Single Phase 2.0AMP Surface Mount Schottky Bridge Rectifier

Fig. 1 Output Current Derating Curve

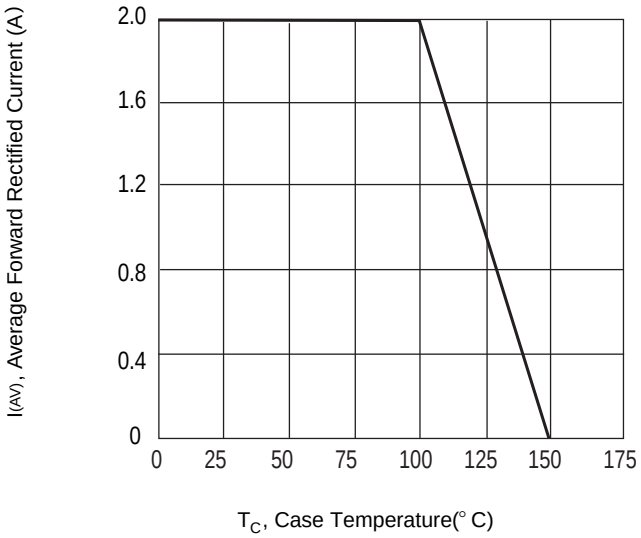


Fig. 2 Typical Forward Characteristics

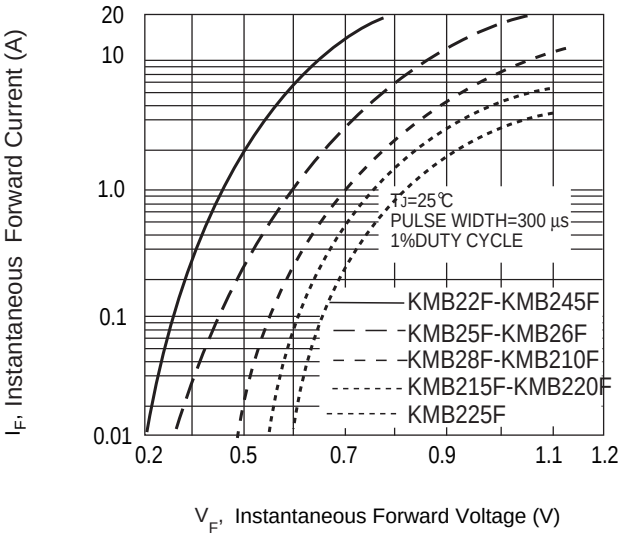


Fig.3 Maximum Peak Forward Surge Current

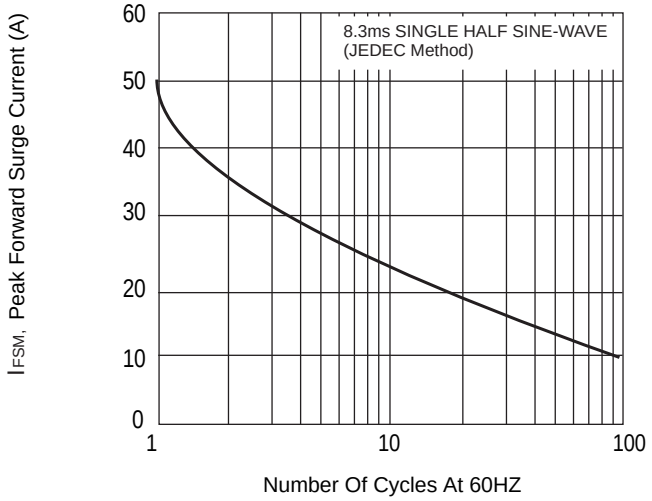


Fig. 4 Typical Junction Capacitance

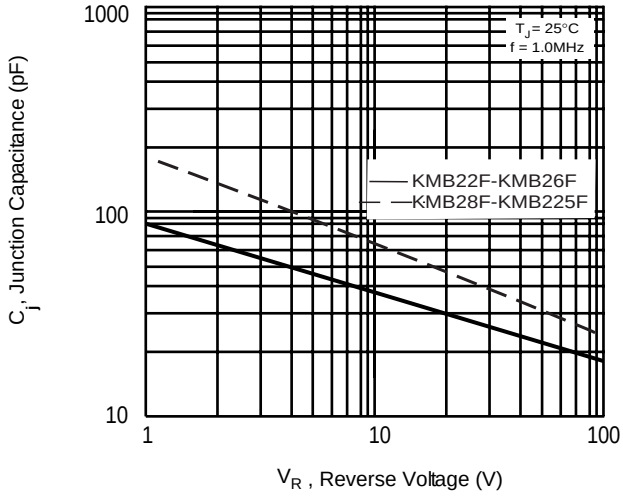


Fig. 5 Typical Reverse Characteristics

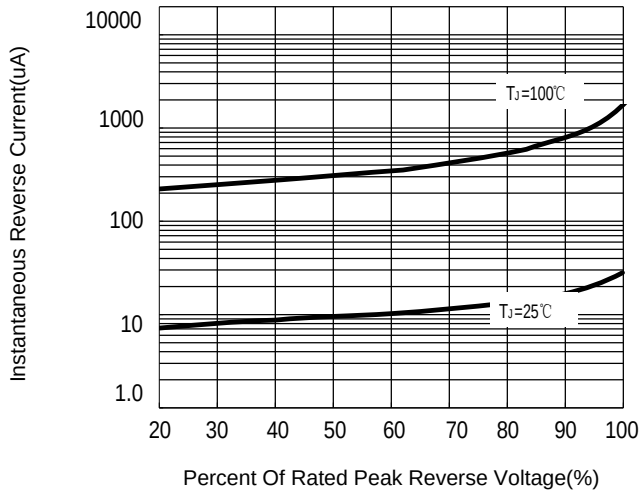
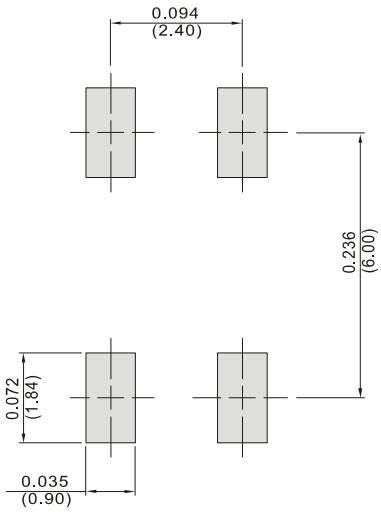


Fig. 6 Mounting Pad Layout



Important Notice and Disclaimer

- Reproducing and modifying information of the document is prohibited without permission from XINNUO
- XINNUO reserves the right to make changes to this document and its products and specifications
- XINNUO disclaims any and all liability arising out of the application or use of any product including damages incidentally and consequentially occurred.
- XINNUO does not assume any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.
- Applications shown on the here in document are examples of standard use and operation. Customers are responsible in comprehending the suitable use in particular applications.

  XINNUO makes no representation or warranty that such applications will be suitable for the specified use without further testing or modification.
- The products shown here in are not designed and authorized for equipments requiring high level of reliability or relating to human life and for any applications concerning life-saving or life-sustaining, such as medical instruments, transportation equipment, aerospace machinery et cetera. Customers using or selling these products for use in such applications do so at their own risk and agree to fully indemnify XINNUO for any damages resulting from such improper use or sale.
- Since XINNUO uses lot number as the tracking base, please provide the lot number for tracking when complaining.