

## **KMB12M THRU KMB125M**

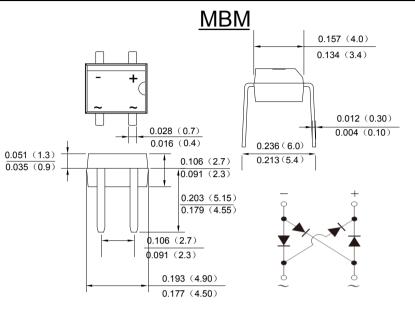
### SINGLE PHASE 1.0 AMP SURFACE MOUNT SCHOTTKY BRIDGE RECTIFIER

#### **Features**

- Schottky Brrier Chip
- · Low Power Loss, High Efficiency
- · Ideally Suited for Automatic Assembly
- Surge Overload Rating to 30A Peak
- Plastic Case Material has UL Flammability Classification Rating 94V-0

#### **Mechanical Data**

- · Case: MB-S, 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,



dimensions in inches and (millimeters)

### Maximum Ratings and Electrical Characteristics @TA=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 12M	KMB 13M	KMB 14M	KMB 145M	KMB 15M	KMB 16M	KMB 18M	KMB 110M	KMB 115M	KMB 120M	KMB 125M	UNITS
Peak Repetitive Reverse Voltage	Vrrm	20	30	40	45	50	60	80	100	150	200	250	
RMS Reverse Voltage	VR(RMS)	14	21	28	31	35	42	56	70	105	140	175	V
DC Blocking Voltage	VDC	20	30	40	45	50	60	80	100	150	200	250	
Average Rectified Output Current ( Note1) @T <sub>C</sub> = 100°C	IF(AV)	1.0										А	
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	Ігѕм	30										А	
I <sup>2</sup> t Rating for Fusing (t < 8.3ms)	l <sup>2</sup> t	3.735										A <sup>2</sup> s	
Forward Voltage per element @I <sub>F</sub> =1.0AV	VFM	0.55 0.7				.7	0	.85	0.9	90	0.92	V	
Peak Reverse Current $@T_A = 25^{\circ}C$		0.1 0.05											
At Rated DC Blocking Voltage $@T_A = 100^{\circ}C$	IRM	10						5					mA
Typical Junction Capacitance per leg	Cj	28									pF		
Typical Thermal Resistance per leg (Note2)	Rejl	16									°C/W		
Operating junction temperature range	TJ	-55 to +150										°C	
Operating and Storage Temperature Range	T <sub>STG</sub>	-55 to +150										°C	

### Note:

- 1. Mounted on aluminum substrate PC board with 1.3mm<sup>2</sup> solder pad.
- 2. Thermal REsistance From Junction to LEAD

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FIG. 1- FORWARD CURRENT DERATING CURVE

1.0

0.8

0.6

0.4

0.2

0.5

50

75

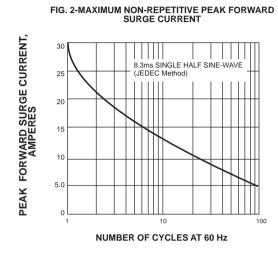
100

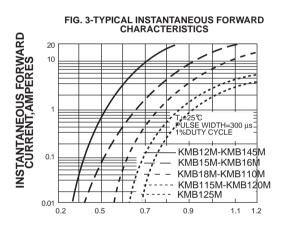
125

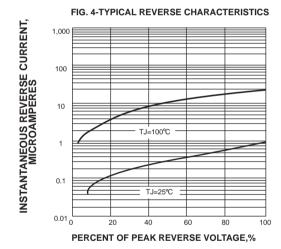
150

175

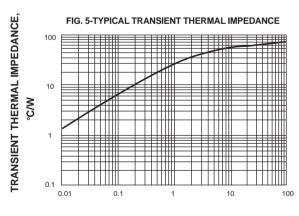
TC, CASE TEMPERATURE (°C)







INSTANTANEOUS FORWARD VOLTAGE, VOLTS



t,PULSE DURATION,sec.



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