

# **KMB22M THRU KMB225M**

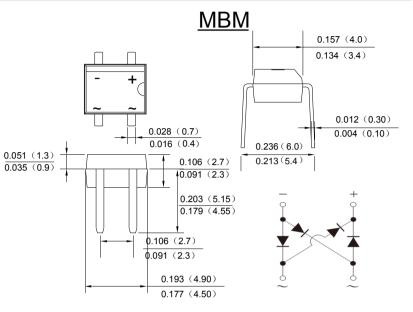
### SINGLE PHASE 2.0 AMP SURFACE MOUNT SCHOTTKY BRIDGE RECTIFIER

#### **Features**

- · Schottky Brrier Chip
- · Low Power Loss, High Efficiency
- · Ideally Suited for Automatic Assembly
- Surge Overload Rating to 50A 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 220M		UNITS			
Peak Repetitive Reverse Voltage	VRRM	20	30	40	45	50	60	80	100	150	200	250	<b>-</b> 1			
RMS Reverse Voltage	VR(RMS)	14   21   28   31   35   42   56   70   105   140   175							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)	2.0										А				
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	lғsм	50									А					
I <sup>2</sup> t Rating for Fusing (t < 8.3ms)	l²t		10.375										A <sup>2</sup> s			
Forward Voltage per element @I <sub>F</sub> =2.0A	VFM	0.55		0	.7	0	0.85 0.		90	0.92	V					
Peak Reverse Current @T <sub>A</sub> = 25°C	L	0.1 0.05														
At Rated DC Blocking Voltage $@T_A = 100^{\circ}C$	I <sub>RM</sub>	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

2.0

1.6

1.2

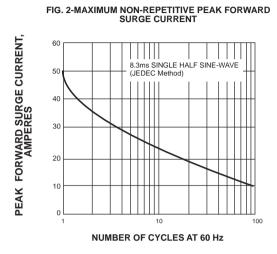
0.8

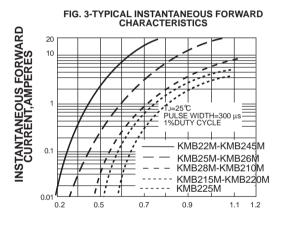
0.4

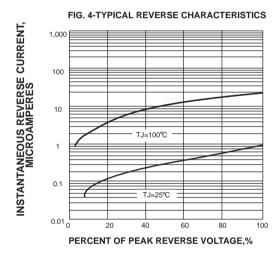
0.4

0.5

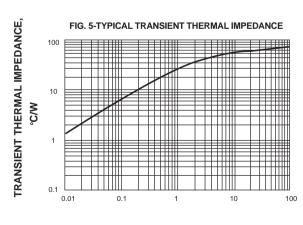
TC, CASE TEMPERATURE (°C)







INSTANTANEOUS FORWARD VOLTAGE, VOLTS



t,PULSE DURATION,sec.



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