

KMB12M THRU KMB125M

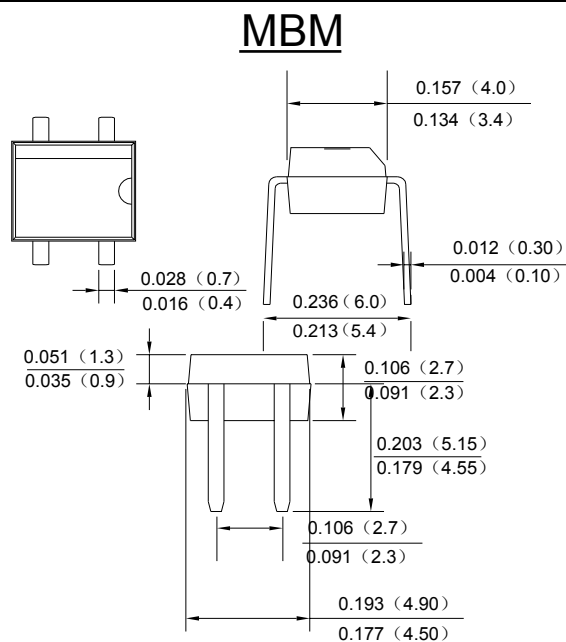
SINGLE PHASE 1.0 AMP SURFACE MOUNT SCHOTTKY BRIDGE RECTIFIER

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,



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 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	V _{RRM}	20	30	40	45	50	60	80	100	150	200	250		
RMS Reverse Voltage	V _{R(RMS)}	14	21	28	31	35	42	56	70	105	140	175	V	
DC Blocking Voltage	V _{DC}	20	30	40	45	50	60	80	100	150	200	250		
Average Rectified Output Current (Note1) @T _A = 90°C	I _O	1.0											A	
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	30											A	
I ² t Rating for Fusing (t < 8.3ms)	I ² t	5.0											A	
Forward Voltage per element @I _F =1.0A	V _{FM}	0.55		0.7			0.85		0.90		0.92		V	
Peak Reverse Current @T _A = 25°C At Rated DC Blocking Voltage @T _A = 100°C	I _{RM}	0.1						0.05						mA
		10						5						
Typical Junction Capacitance per leg	C _J	28											pF	
Typical Thermal Resistance per leg (Note2)	R _{θJA}	75											°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 1.3mm² solder pad.
2. Thermal REsistance From Junction to Ambient

FIG. 1- FORWARD CURRENT DERATING CURVE

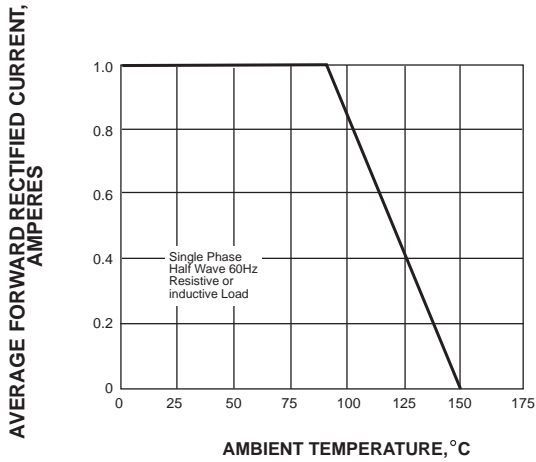


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

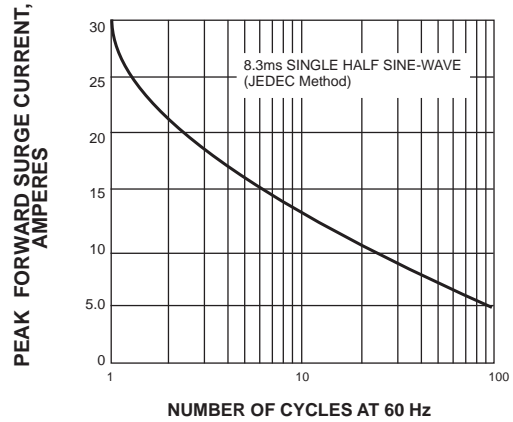


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

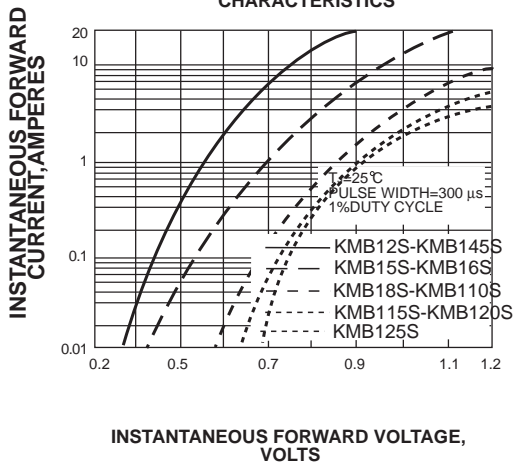


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

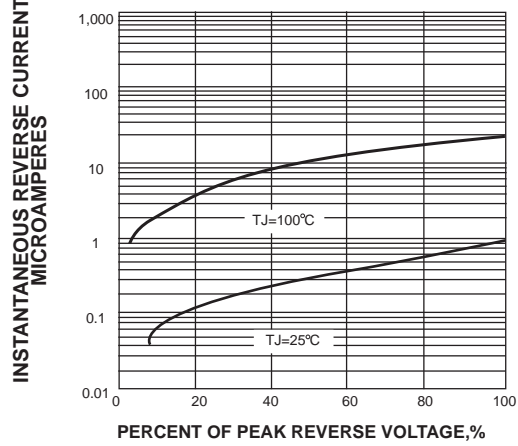


FIG. 5-TYPICAL TRANSIENT THERMAL IMPEDANCE

