



KMB12F THRU KMB125F

Surface Mount Schottky Bridge Rectifiers

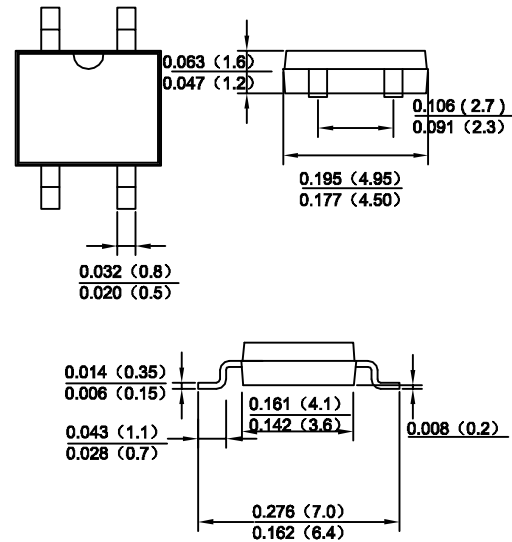
Features

- 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-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,

MBF(GW)



Dimensions in inches and (milimeters)

Maximum Ratings and Electrical Characteristics @ $T_A=25^\circ\text{C}$ unless otherwise specified

Single Phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

TYPE NUMBER	SYMBOL	KMB 12F	KMB 14F	KMB 16F	KMB 18F	KMB 110F	KMB 115F	KMB 120F	KMB 125F	UNITS
Peak Repetitive Reverse Voltage	V_{RRM}	20	40	60	80	100	150	200	250	
RMS Reverse Voltage	$V_R(RMS)$	14	28	42	56	70	105	140	175	V
DC Blocking Voltage	V_{DC}	20	40	60	80	100	150	200	250	
Average Rectified Output Current (Note1) @ $T_A = 90^\circ\text{C}$	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^2t Rating for Fusing ($t < 8.3\text{ms}$)	I^2t	5.0								A^2s
Forward Voltage per element @ $I_F = 1.0\text{A}$	V_{FM}	0.55	0.7	0.85	0.95	0.98				V
Peak Reverse Current @ $T_A = 25^\circ\text{C}$ At Rated DC Blocking Voltage @ $T_A = 100^\circ\text{C}$	I_{RM}	0.1			0.05					mA
		10			5					
Typical Junction Capacitance per leg	C_j	28								pF
Typical Thermal Resistance per leg (Note2)	$R_{\theta JA}$	75								$^\circ\text{C/W}$
Operating junction temperature range	T_J	-55 to +150								$^\circ\text{C}$
Operating and Storage Temperature Range	T_{STG}	-55 to +150								$^\circ\text{C}$

Note:

1. Mounted on aluminum substrate PC board with 1.3mm^2 solder pad.
2. Thermal RESistance From Junction to Ambient



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Characteristic Curves ($T_A=25^\circ\text{C}$ unless otherwise noted)

FIG. 1- FORWARD CURRENT DERATING CURVE

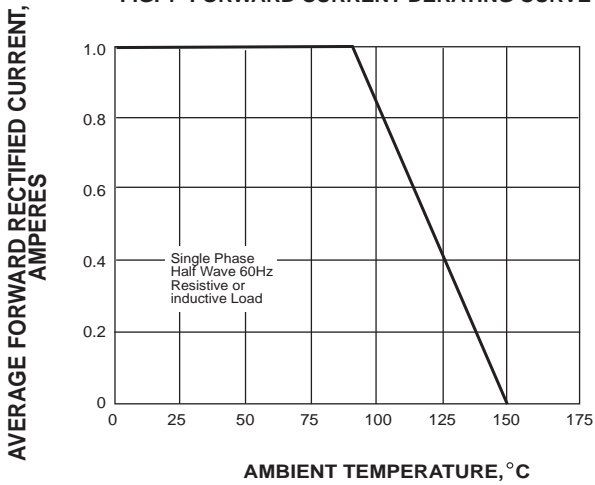


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

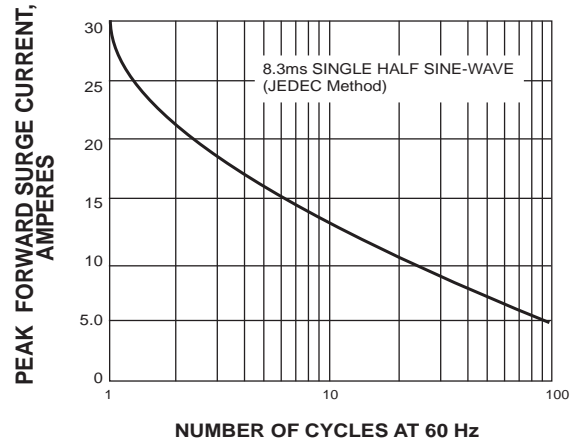


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

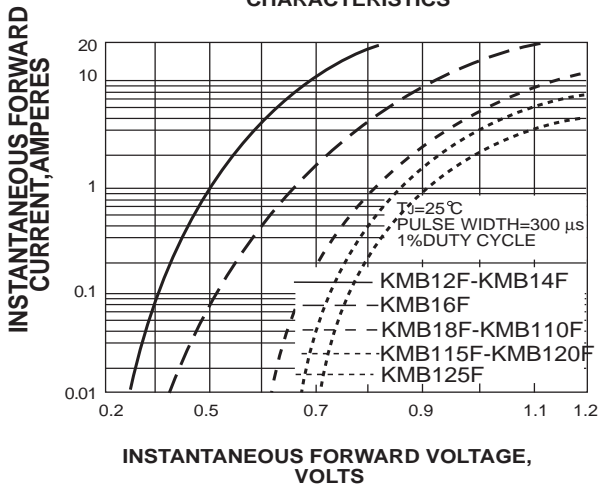


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

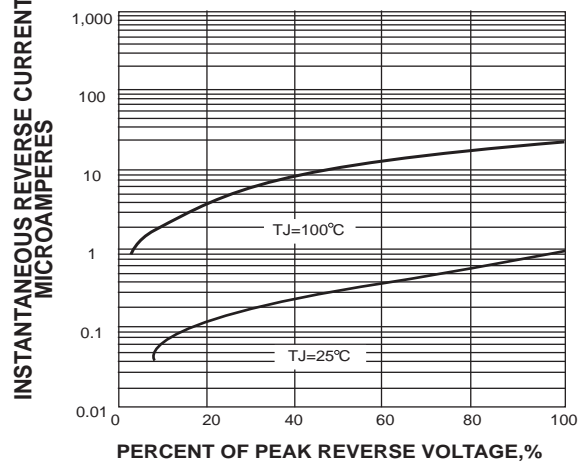


FIG. 5-TYPICAL TRANSIENT THERMAL IMPEDANCE

