

KMB12S-KMB125S

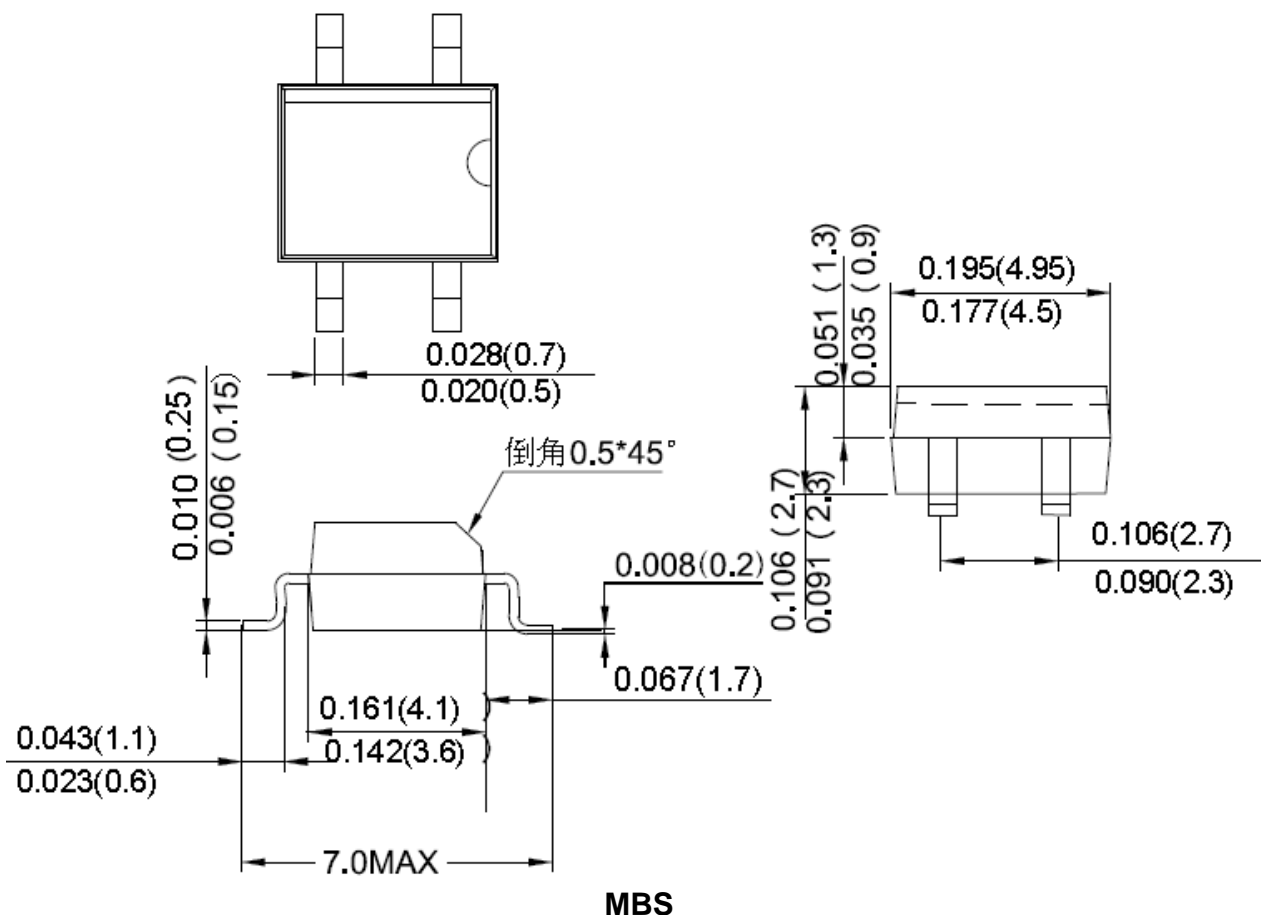
SINGLE PHASE 1.0 AMP SURFACE MOUNT SCHOTTKY BRIDGE RECTIFIER

Features:

- Schottky Brier 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

Mechanical Dimensions: In Inches/mm




KMB12S-KMB125S

Technical Data
Data Sheet N1798, Rev. -

Green Products

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 12S	KMB 13S	KMB 14S	KMB 145S	KMB 15S	KMB 16S	KMB 18S	KMB 110S	KMB 115S	KMB 120S	KMB 125S	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_{DC}	20	30	40	45	50	60	80	100	150	200	250	V
RMS Reverse Voltage	V_{RMS}	14	21	28	31	35	42	56	70	105	140	175	V
Average forward rectified output current (Note 1) @ $T_A = 90^\circ\text{C}$	I_o	1											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) @ $I_F = 1\text{A}$	V_{FM}	0.55			0.7		0.85		0.90		0.92		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 10							0.05 5				mA
Typical Junction Capacitance(per leg)	C_J	28											pF
Typical Thermal Resistance (per leg) (Note 2)	$R_{\theta JA}$	75											$^\circ\text{C}/\text{W}$
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to +150											$^\circ\text{C}$

Note: 1. Mounted on glass epoxy PC board with 1.3mm^2 solder pad.

2. Thermal Resistance from Junction to Ambient

FIG. 1- FORWARD CURRENT DERATING CURVE

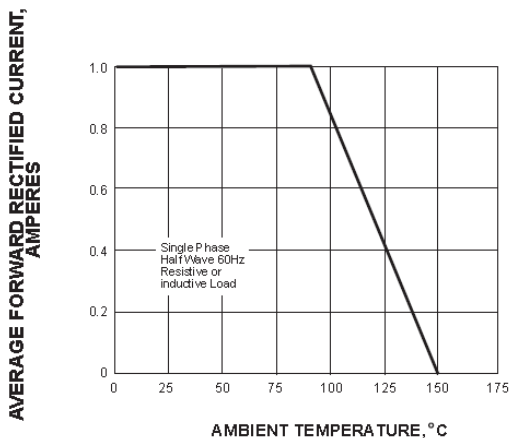


FIG. 2- MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

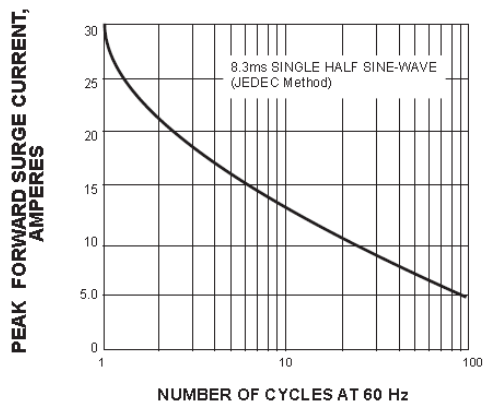


FIG. 3- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

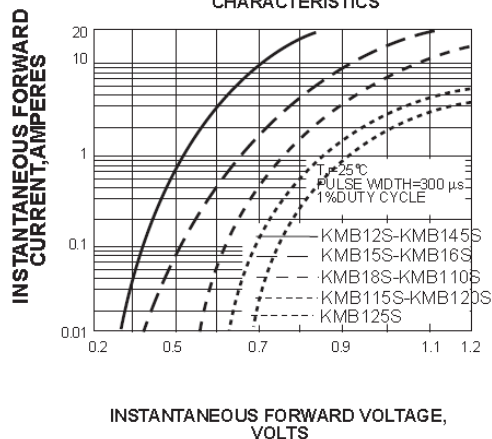


FIG. 4- TYPICAL REVERSE CHARACTERISTICS

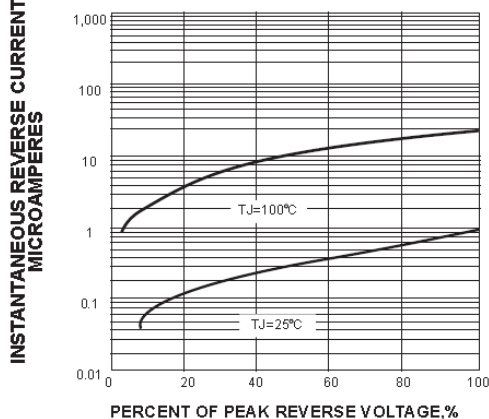
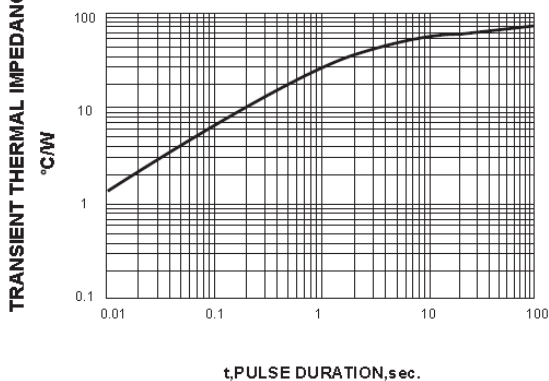


FIG. 5- TYPICAL TRANSIENT THERMAL IMPEDANCE





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