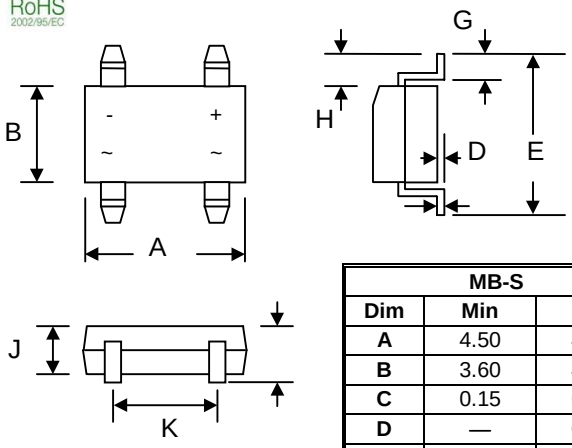
KMB12S – KMB125S

1.0A SURFACE MOUNT SCHOTTKY BARRIER BRIDGE RECTIFIER

Features

- Schottky Barrier Chip
- Ideally Suited for Automatic Assembly
- Low Power Loss, High Efficiency
- High Surge Current Capability
- For Use in Low Voltage Application
- Plastic Case Material has UL Flammability Classification Rating 94V-O



MB-S		
Dim	**Min**	**Max**
A	4.50	4.95
B	3.60	4.10
C	0.15	0.35
D	—	0.20
E	6.40	7.00
G	0.50	1.10
H	1.30	1.70
J	2.30	2.70
K	2.30	2.70
L	—	3.00
All Dimensions in mm		

Mechanical Data

- Case: MB-S, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: As Marked on Case
- Weight: 0.22 grams (approx.)
- 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

Characteristic	Symbol	KMB 12S	KMB 13S	KMB 14S	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_R	20	30	40	50	60	80	100	150	200	250	V
RMS Reverse Voltage	$V_{R(RMS)}$	14	21	28	35	42	56	70	105	140	175	V
Average Rectified Output Current @T_L = 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
Forward Voltage @I_F = 1.0A	V_{FM}	0.50			0.70		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 20										mA
Typical Thermal Resistance (Note 1)	$R_{\theta JL}$ $R_{\theta JA}$	10 50										°C/W
Typical Junction Capacitance	C_j	110					30		110			pF
Operating Temperature Range	T_j	-65 to +150										°C
Storage Temperature Range	T_{STG}	-65 to +150										°C

Note: 1. Mounted on P.C. Board with 5.0mm^2 copper pad area.

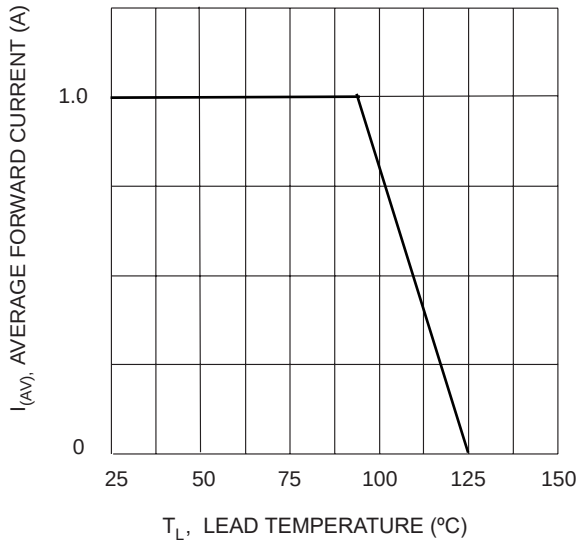


Fig. 1 Forward Current Derating Curve

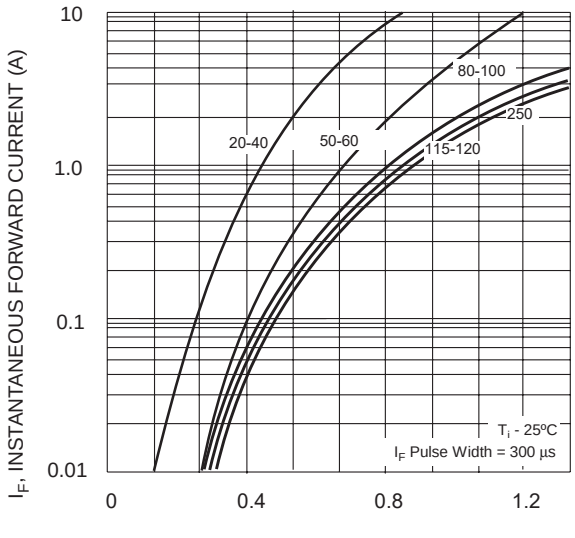


Fig. 2 Typ. Forward Characteristics

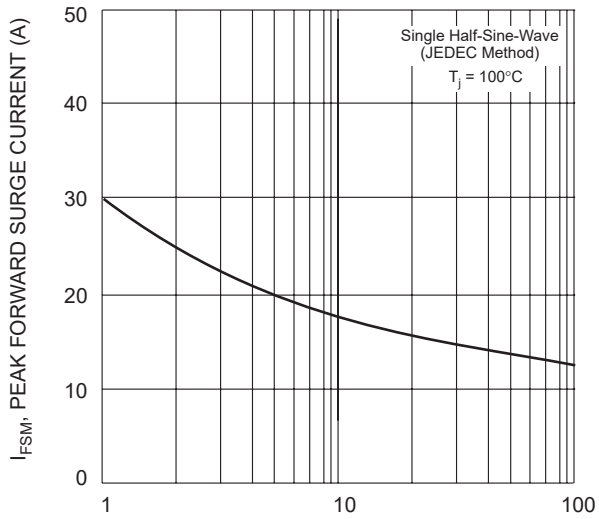


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

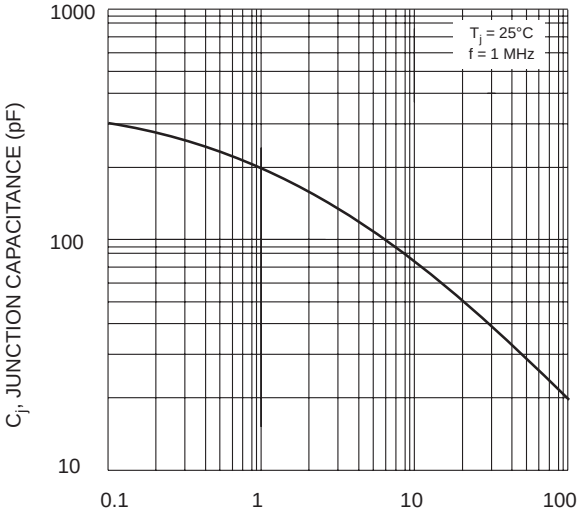


Fig. 4 Typical Junction Capacitance

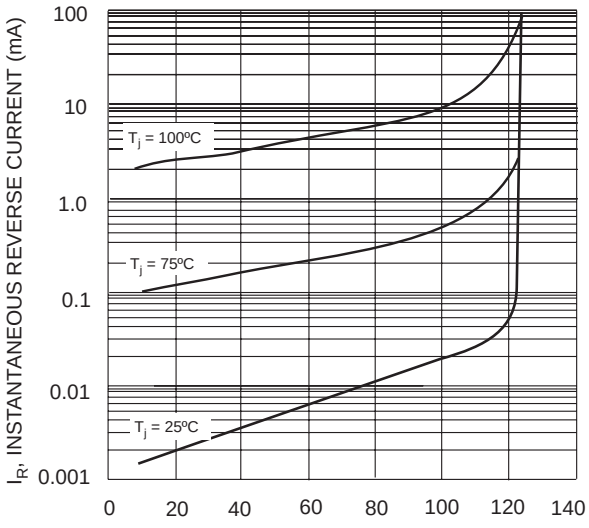


Fig. 5 Typical Reverse Characteristics