



DONGGUAN NANJING ELECTRONICS LTD.,

MBS Plastic-Encapsulate Bridge Rectifier

KMB12S THRU KMB120S Schottky Bridge Rectifier

Features

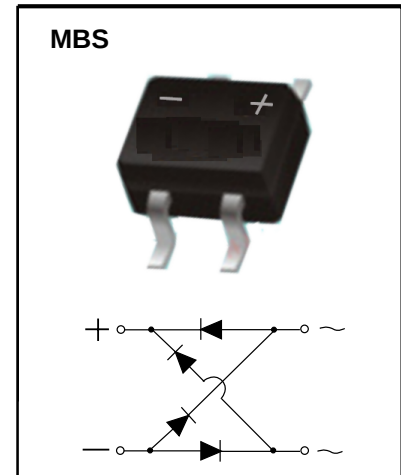
- $I_{F(AV)}$ 1A
- V_{RRM} 20V-200V
- High surge current capability
- Polarity: Color band denotes cathode

Applications

- Rectifier

Marking

- KMB1XXS
X : From 2 To 20



Limiting Values(Absolute Maximum Rating)

Item	Symbol	Unit	Test Conditions	KMB1					
				2S	4S	6S	8S	10S	20S
Repetitive Peak Reverse Voltage	V_{RRM}	V		20	40	60	80	100	200
Maximum RMS Voltage	V_{RMS}	V		14	28	42	56	70	140
Average Forward Current	$I_{F(AV)}$	A	60Hz Half-sine wave, Resistance load, FIG.1	1.0					
Surge(Non-repetitive)Forward Current	I_{FSM}	A	60Hz Half-sine wave, 1 cycle, $T_a=25^{\circ}\text{C}$	30					
Junction Temperature	T_J	$^{\circ}\text{C}$		-55 ~ +150					
Storage Temperature	T_{STG}	$^{\circ}\text{C}$		-55 ~ +150					

Electrical Characteristics ($T = 25^{\circ}\text{C}$ Unless otherwise specified)

Item	Symbol	Unit	Test Condition		KMB1					
					2S	4S	6S	8S	10S	20S
Peak Forward Voltage	V _F	V	I _F =1.0A		0.5		0.7	0.85		
Peak Reverse Current	I _{RRM1}	mA	V _{RM} =V _{RRM}	T _a =25℃	0.05					
	T _a =100℃			5.0						
Thermal Resistance(Typical)	R _{θJ-A}	℃/W	Between junction and ambient		70					
	R _{θJ-L}		Between junction and terminal		15					

Notes:

Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.2" x 0.2" (5.0 mm x 5.0 mm) copper pad areas

Typical Characteristics

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

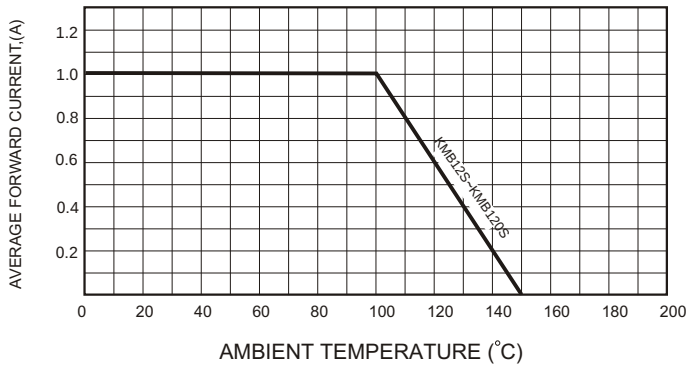


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

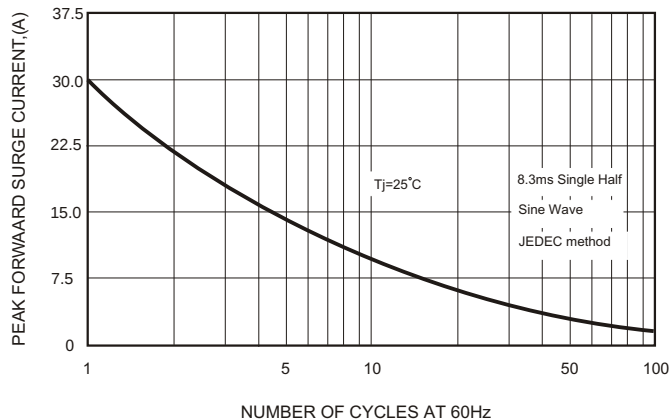


FIG.4-TYPICAL JUNCTION CAPACITANCE

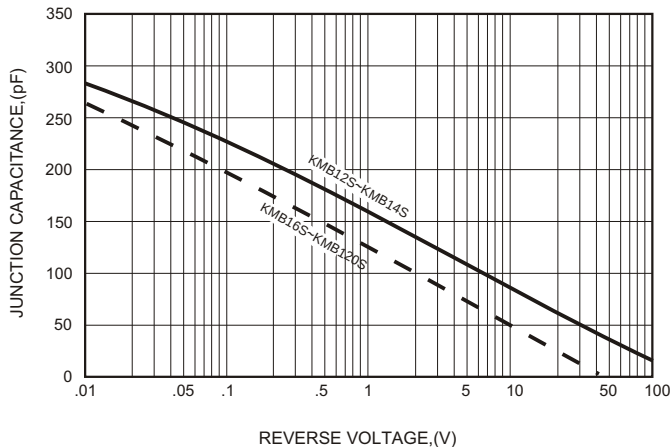


FIG.2-TYPICAL FORWARD CHARACTERISTICS

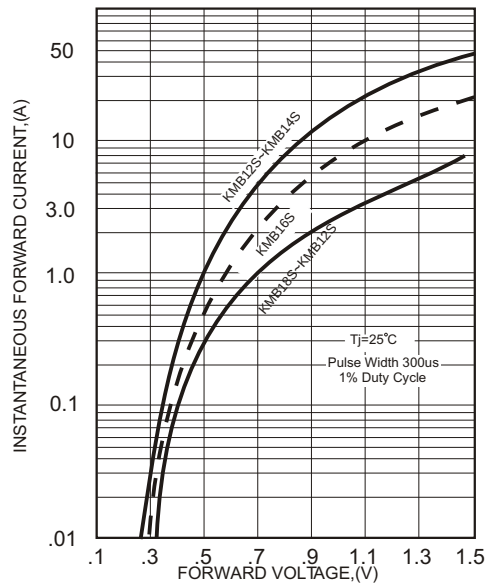
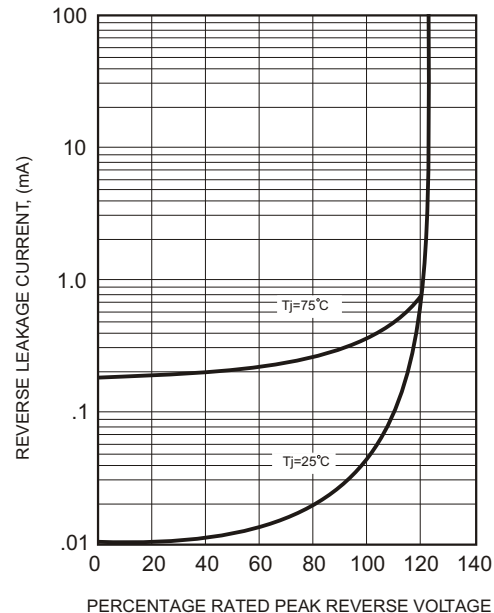
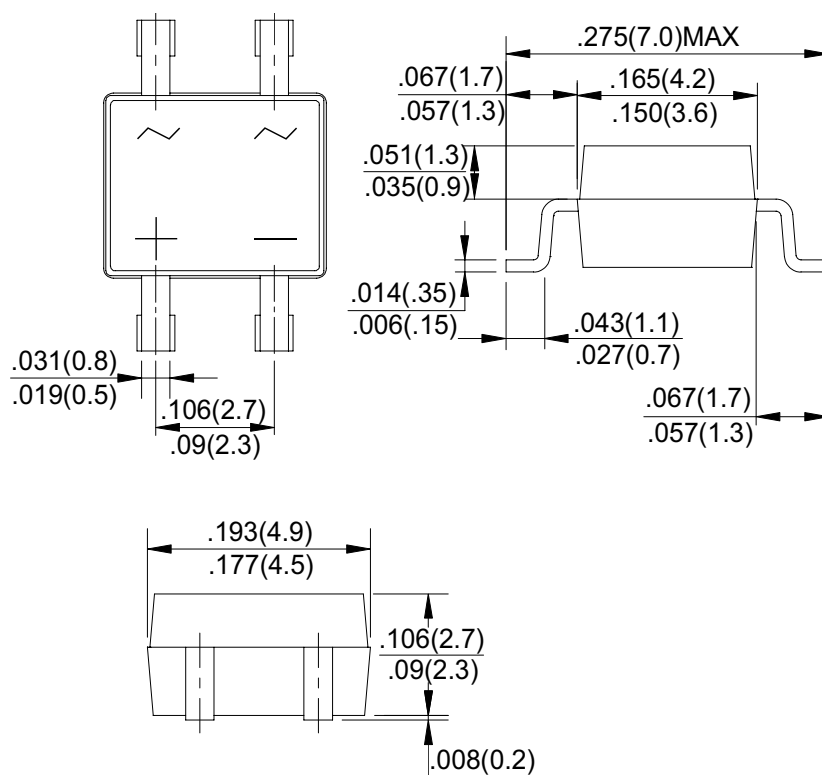


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

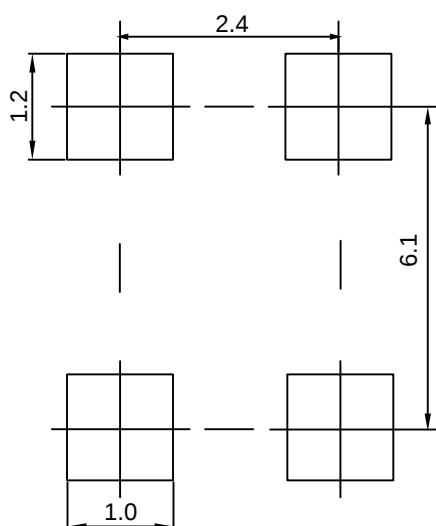


MBS Package Outline Dimensions



Dimensions in inches and (millimeters)

MBS Suggested Pad Layout



Note:

1. Controlling dimension: in millimeters.
2. General tolerance: ± 0.05 mm.
3. The pad layout is for reference purposes only.

Reel Taping Specifications For Surface Mount Devices-MBS

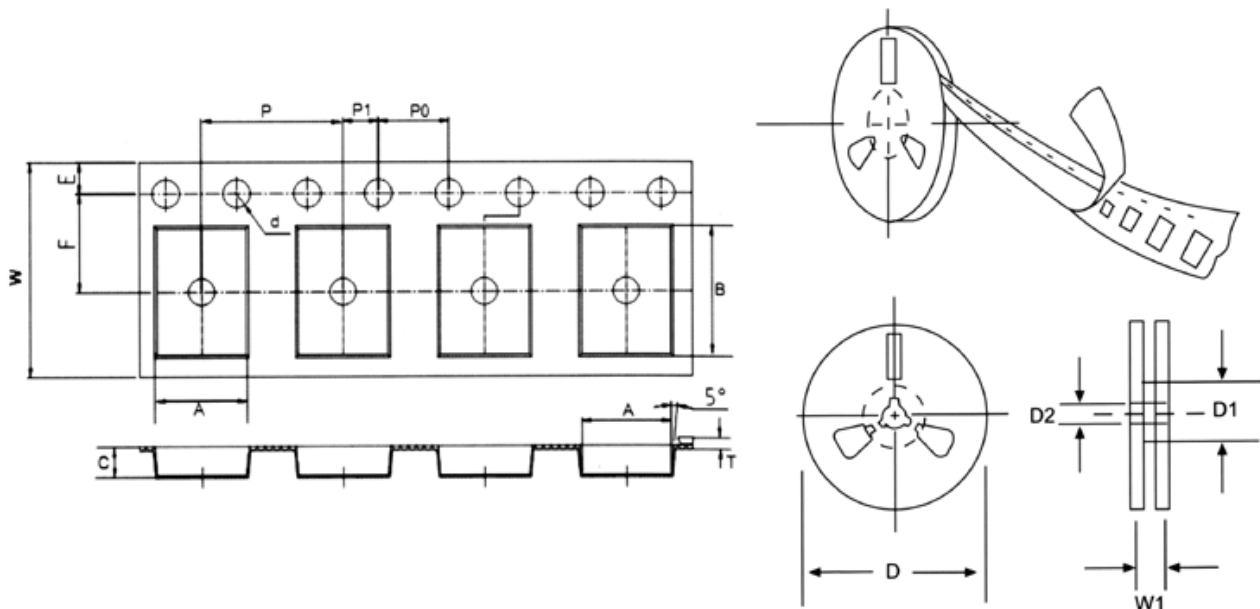


FIG:CONFIGURATION OF SURFACE MOUNTED DEVICES TAPING

ITEM	SYMBOL	MBS mm(inch)
Carrier width	A	5.05+0.1(0.198+0.004)
Carrier length	B	7.22+0.1(0.284+0.004)
Carrier depth	C	2.88+0.1(0.113+0.004)
Sprocket hole	d	1.55±0.05(0.061±0.002)
Reel outside diameter	D	330±2.0(13±0.079)
Reel inner diameter	D1	75 ±1.0 (2.95 ±0.039)
Feed hole diameter	D2	13+0.5(0.512+0.020)
Strocket hole position	E	1.75+0.1(0.069+0.004)
Punch hole position	F	5.50+0.05(0.217+0.002)
Punch hole pitch	P	8.0+0.1(0.315+0.004)
Sprocket hole pitch	P0	4.0+0.1(0.157+0.004)
Embossment center	P1	2.0+0.1(0.079+0.004)
Totall tape thickness	T	0.20-0.70(0.080-0.028)
Tape width	W	12.0+0.3/-0.1(0.472+0.004)
Reel width	W1	16.8+2.0(0.661+0.079)

NOTE:Devices are packde in accordance with EIA standard RS-481-A and specification given above.