DONGGUAN NANJING ELECTRONICS LTD.,

MBS Plastic-Encapsulate Bridge Rectifier

KMB32S THRU KMB320S Schottky Bridge Rectifier

Features

- $I_{F(AV)}$ 3A
- V_{RRM} 20V-200V
- High surge current capability
- Polarity: Color band denotes cathode

Applications

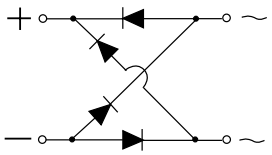
- Rectifier

Marking

- SS3X

  X：From 2 To 20

MBS



Limiting Values(Absolute Maximum Rating)

Item	Symbol	Unit	Test Conditions	SS3								
				2	3	4	5	6	8	10	15	20
Repetitive Peak Reverse Voltage	V_{RRM}	V		20	30	40	50	60	80	100	150	200
Maximum RMS Voltage	V_{RMS}	V		14	21	28	35	42	56	70	105	140
Average Forward Current	$I_{F(AV)}$	A	60Hz Half-sine wave，Resistance load，FIG.1	3.0								
Surge(Non-repetitive)Forward Current	I_{FSM}	A	60Hz Half-sine wave，1 cycle，Ta=25℃	80								
Junction Temperature	T_J	℃		-55 ~ +150								
Storage Temperature	T_{STG}	℃		-55 ~ +150								

Electrical Characteristics (T =25℃ Unless otherwise specified)

Item	Symbol	Unit	Test Condition		SS3								
					2	3	4	5	6	8	10	15	20
Peak Forward Voltage	V_F	V	I_F=3.0A		0.55			0.70		0.85		0.95	
Peak Reverse Current	I_{RRM1}	mA	$V_{RM}=V_{RRM}$	Ta=25℃				0.1					
	I_{RRM2}			Ta=100℃	10			5.0					
Thermal Resistance(Typical)	$R_{\theta J-A}$	℃/W	Between junction and ambient		75								
	$R_{\theta J-L}$		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: FORWARD CURRENT DERATING CURVE

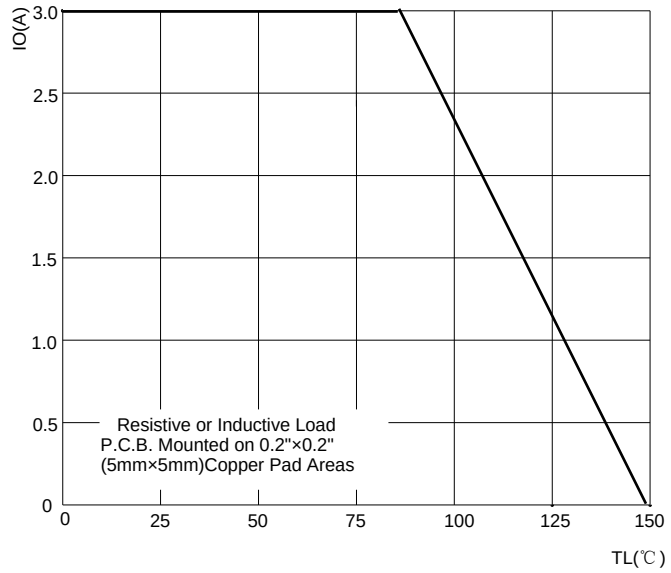


FIG.2: MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

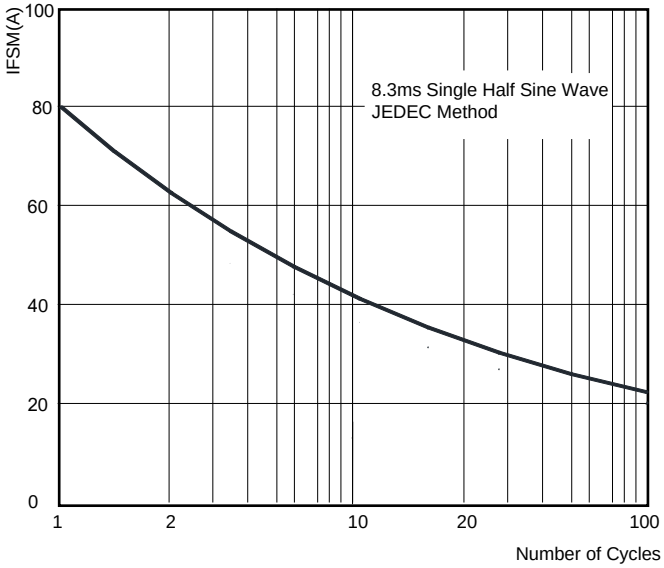


FIG.3: TYPICAL FORWARD CHARACTERISTICS

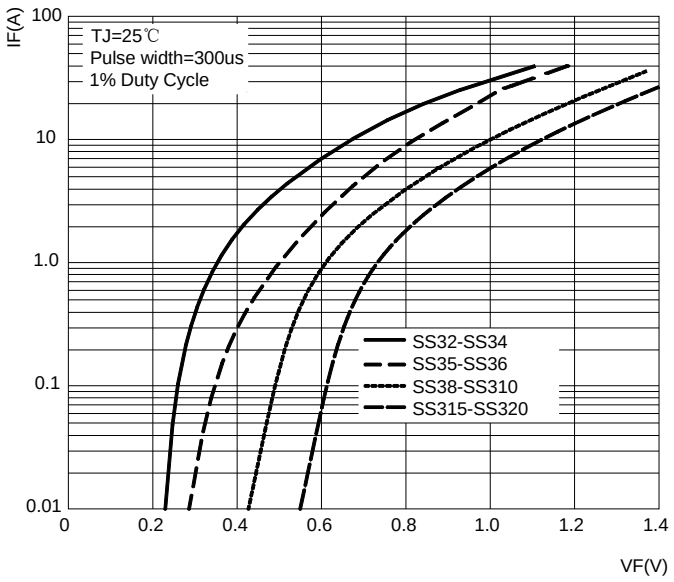
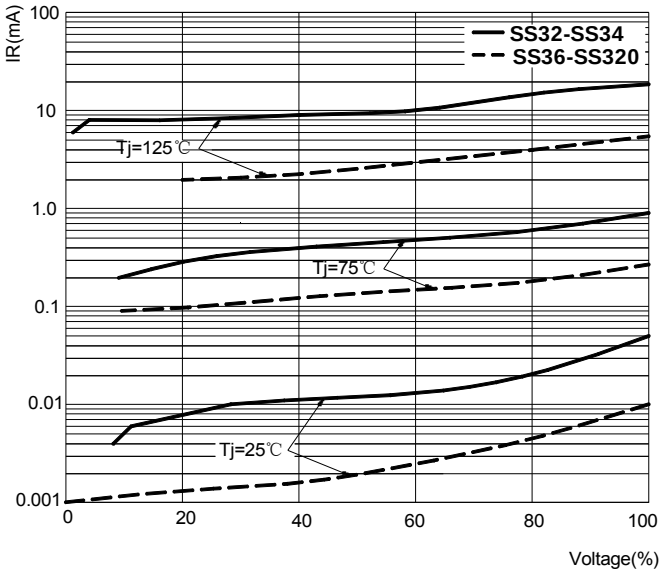
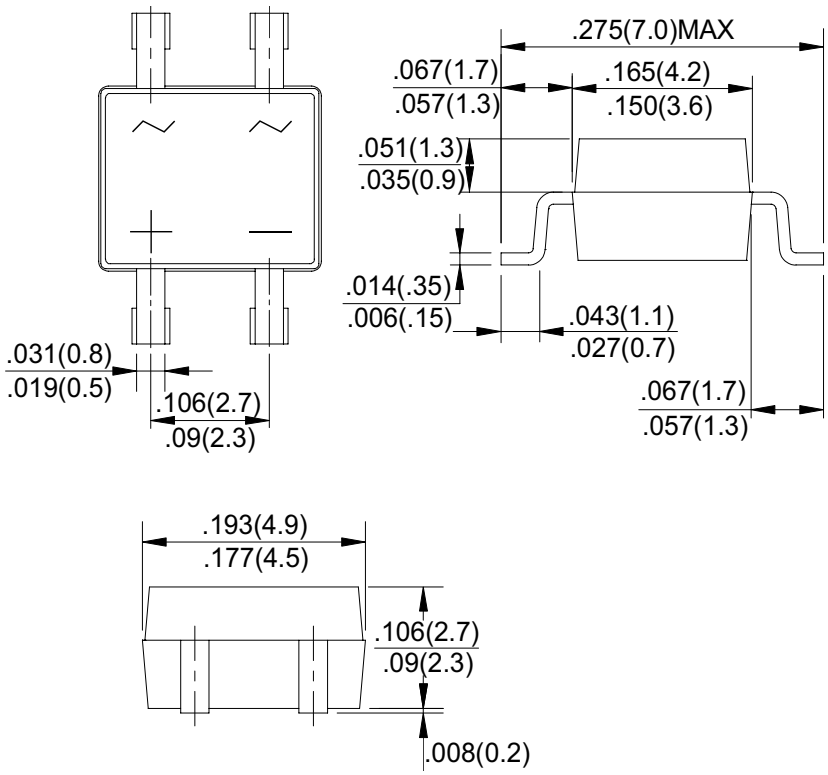


FIG.4：TYPICAL REVERSE CHARACTERISTICS

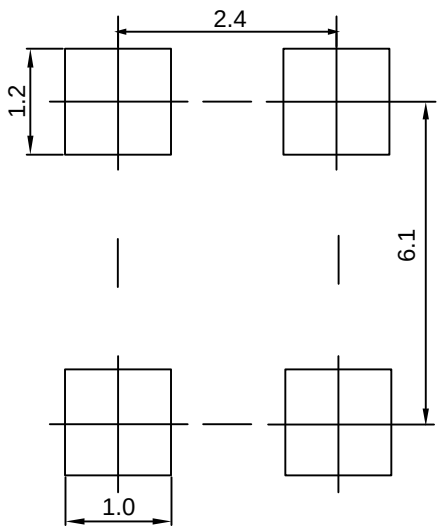


MBS Package Outline Dimensions



Dimensions in inches and (millimeters)

MBS Suggested Pad Layout



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

Reel Taping Specifications For Surface Mount Devices-MBS

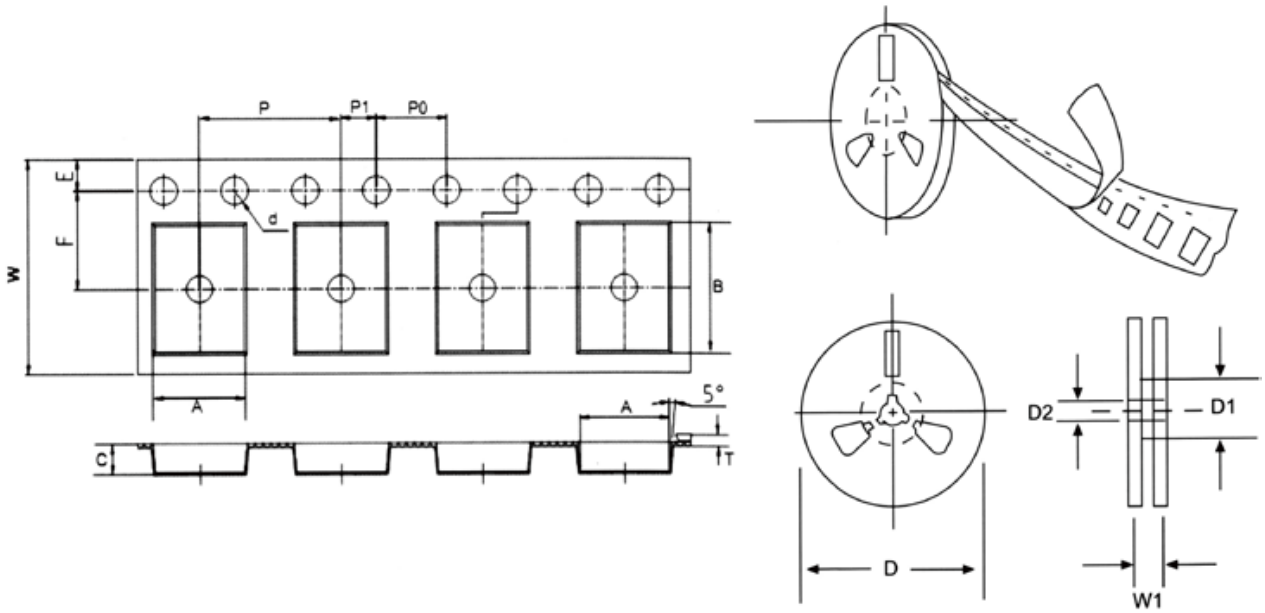


FIG:CONFIGURATION OF SURFACE MOUNTED DEVICES TAPING

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.