



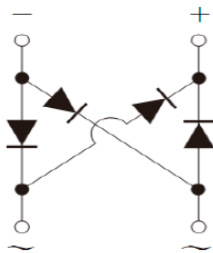
MB05SN THRU MB10SN



Surface Mount Glass Passivated Bridge Rectifier



MBS



Primary Characteristics

I_F	0.5	A
V_{RRM}	50~1000	V
I_{FSM}	25	A
V_F	1	V
$T_J \text{ max}$	150	°C

Features

- Glass Passivated Die Construction
- Low leakage
- Ideal for printed circuit board
- Surge overload rating-25A peak
- Designed for Surface Mount Application
- Plastic Material-UL Flammability 94V-0

Mechanical Data

- Case:Reliable low cost construction utilizing molded plastic technique
- Terminals:Plated Leads Solderable per MIL-STD-STD-202,Method208
- Polarity:As Marked on Case
- Mounting Position:Any
- Marking:Type Number

Ordering Information

Part No.	Remark	Package	Packing
MB05SN THRU MB10SN	General	MBS	3000 / Tape & Reel
MB05SN THRU MB10SN-H	Halogen Free		

Maximum Ratings (TA=25°C unless otherwise noted)

Parameter	Symbol	MB 05SN	MB 1SN	MB 2SN	MB 4SN	MB 6SN	MB 8SN	MB 10SN	Units
Peak Repetitive Reverse Voltage	V _{RRM}	50	100	200	400	600	800	1000	V
Working Peak Reverse Voltage	V _{RWM}								
DC Blocking Voltage	V _{DC}								
RMS Reverse Voltage	V _{RMS}	35	70	140	280	420	560	700	V
Average Rectified Output Current @Tc=100°C	I _{F(AV)}	0.5							A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	25							A
I ² tRating for fusing (t<8.3ms)	I ² t	2.594							A ^{3s}
Forward Voltage per element @I _F =0.5A	V _{FM}	1.0							V
Peak Reverse Current @ TA=25°C	I _R	5.0							uA
At Rated DC Blocking Voltage @ TA=125°C		200							
Typical Junction Capacitance per leg (Note 1)	C _J	13							pF
Typical Thermal Resistance per leg	R _{θJA}	60							°C/W
	R _{θJL}	16							
Operating and Storage Temperature Range	T _J ,T _{STG}	-55~+150							°C
Marking Code		MB 05SN	MB 1SN	MB 2SN	MB 4SN	MB 6SN	MB 8SN	MB 10SN	

Note:1.Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.



Surface Mount Glass Passivated Bridge Rectifier

Rating and Characteristics Curves

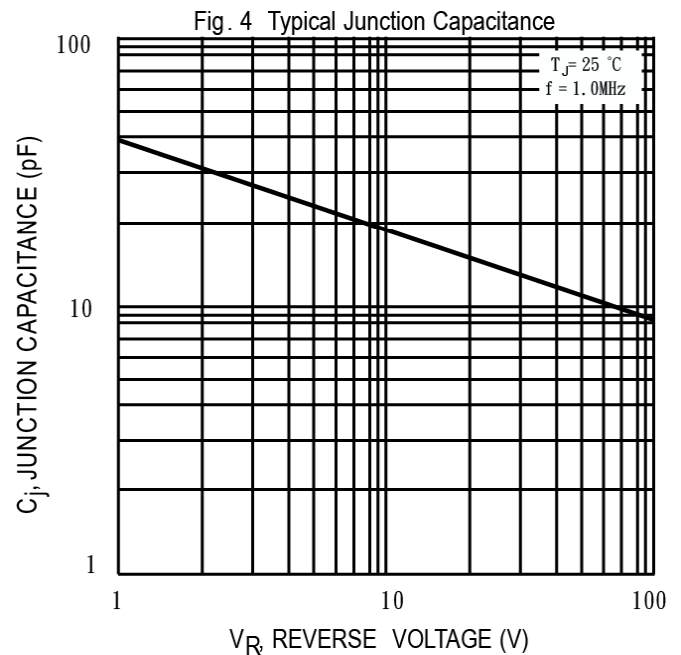
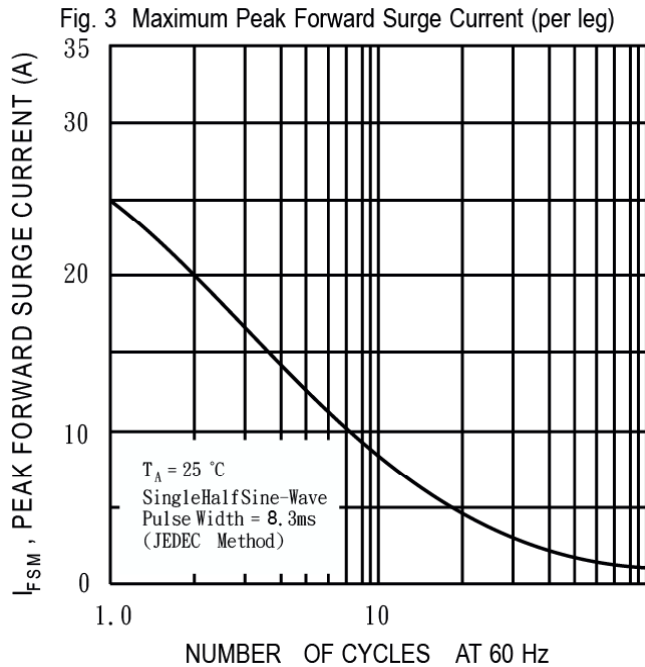
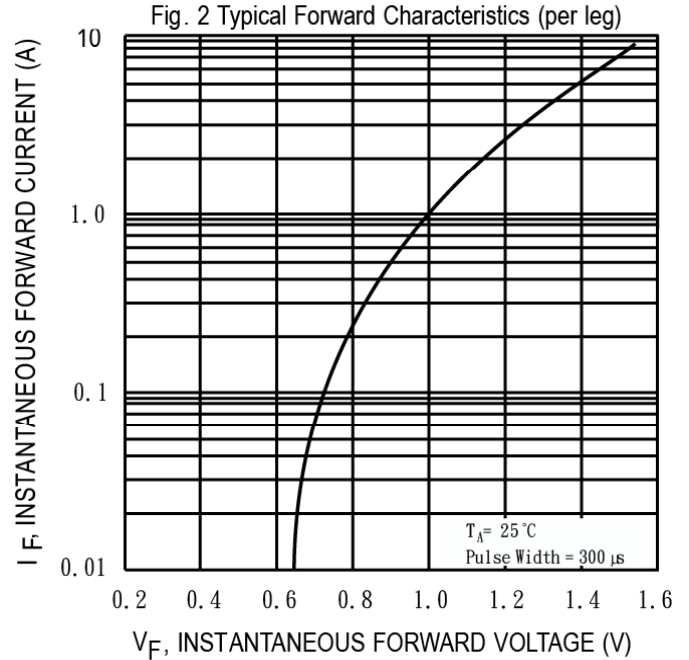
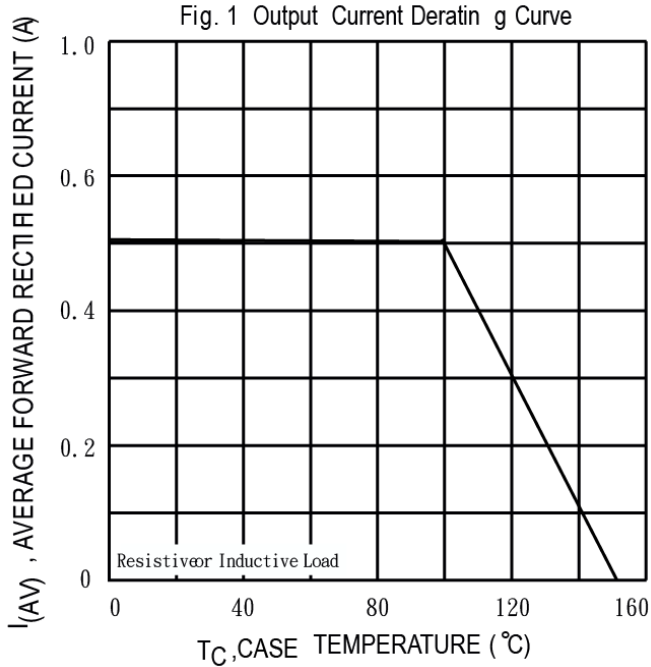
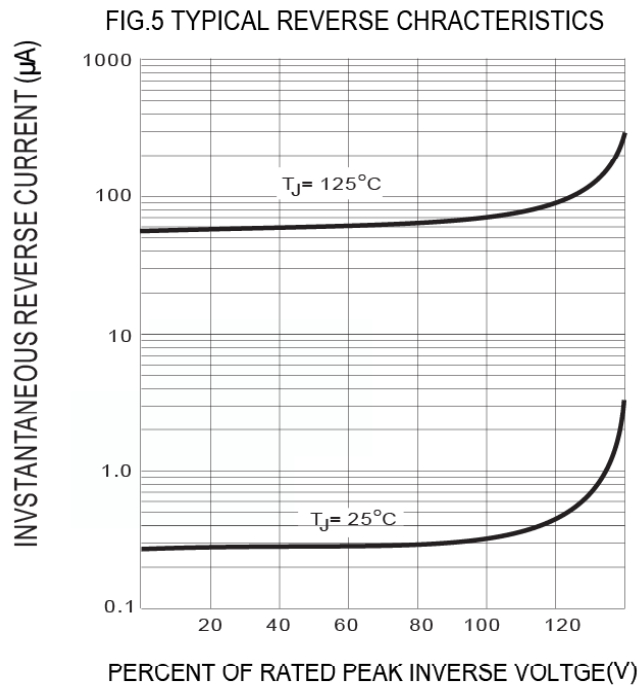


FIG.6 MOUNTING PAD LAYOUT



Surface Mount Glass Passivated Bridge Rectifier

Rating and Characteristics Curvers



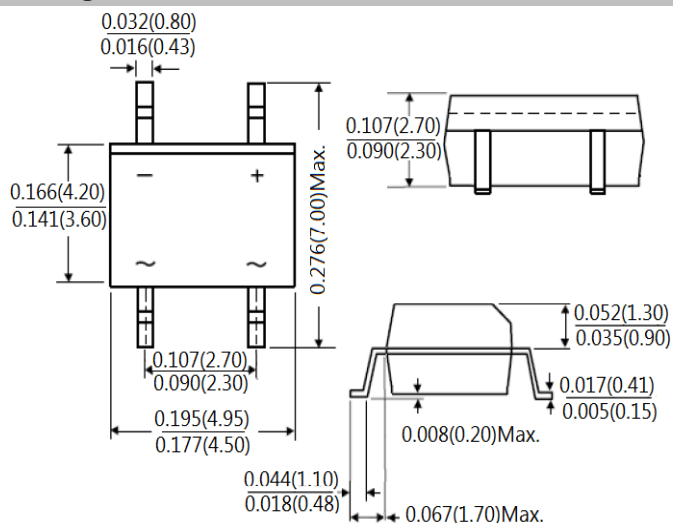


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Surface Mount Glass Passivated Bridge Rectifier

Package Outline Dimensions

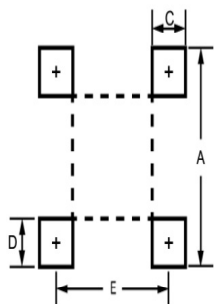


MBS

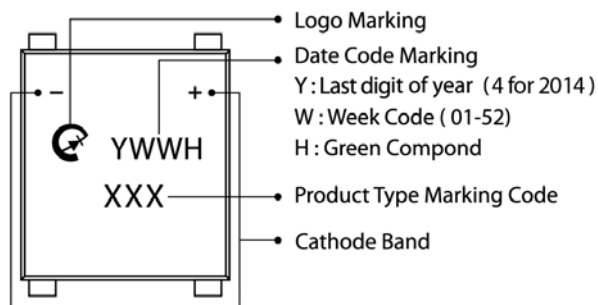
Dimensions in inches and (millimeters)

Suggested Pad Layout

Outline	MBS (mm)
Dimension	
A	6.91
C	0.90
D	1.50
E	2.67

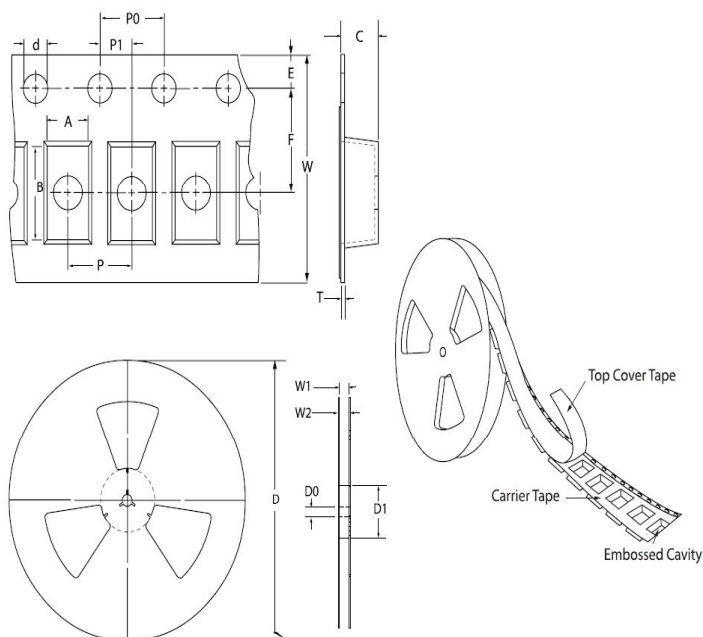


Marking Information



Tap & Reel Specification

ITEM	SYMBOL	MBS(mm)
Carrier width	A	4.90±0.01
Carrier length	B	7.24±0.1
Carrier depth	C	—
Sprocket hole	d	1.55±0.05
Reel outside diameter	D	330±2.0
Feed hole diameter	D0	13.0±0.2
Reel inner diameter	D1	50(min)
Sprocket hole position	E	1.75±0.1
Punch hole position	F	5.5±0.05
Sprocket hole pitch	P	—
Sprocket hole pitch	P0	—
Embossment center	P1	2.0±0.05
Overall tape thickness	T	0.30
Tape width	W	12.0±0.3
Reel width	W2	14.4(max)
Reel width	W1	—



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Bridge Rectifier****LEGAL DISCLAIMER**

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