



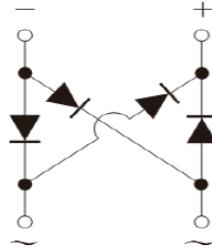
MB05SN THRU MB10SN



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 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	MB	MB	MB	MB	MB	MB	Units
		05SN	1SN	2SN	4SN	6SN	8SN	10SN	
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^2t Rating 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	$R_{\theta JA}$	60							°C/W
	$R_{\theta JL}$	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

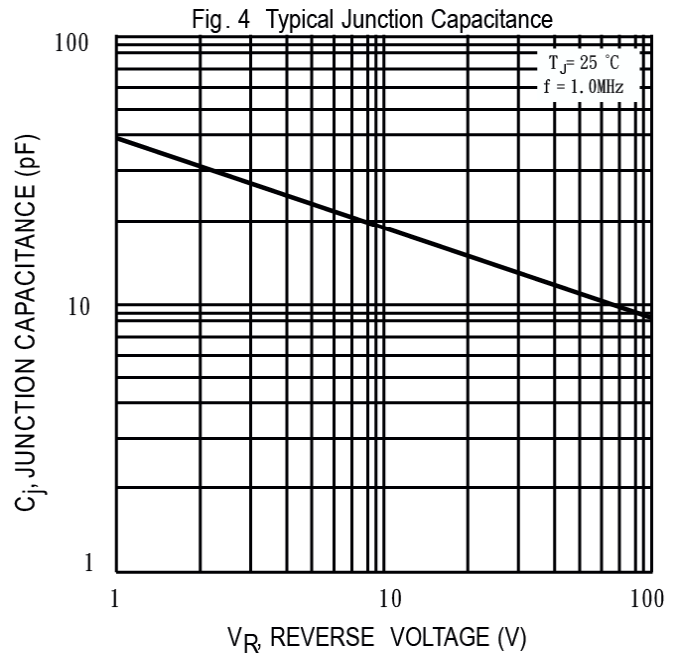
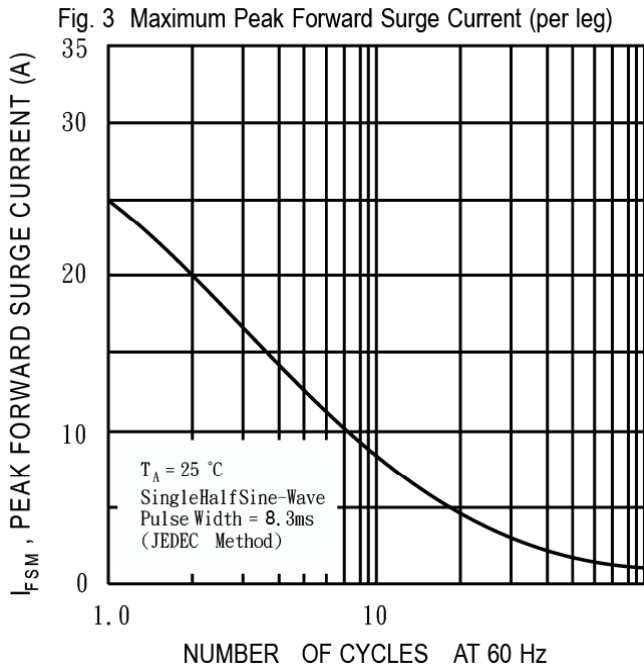
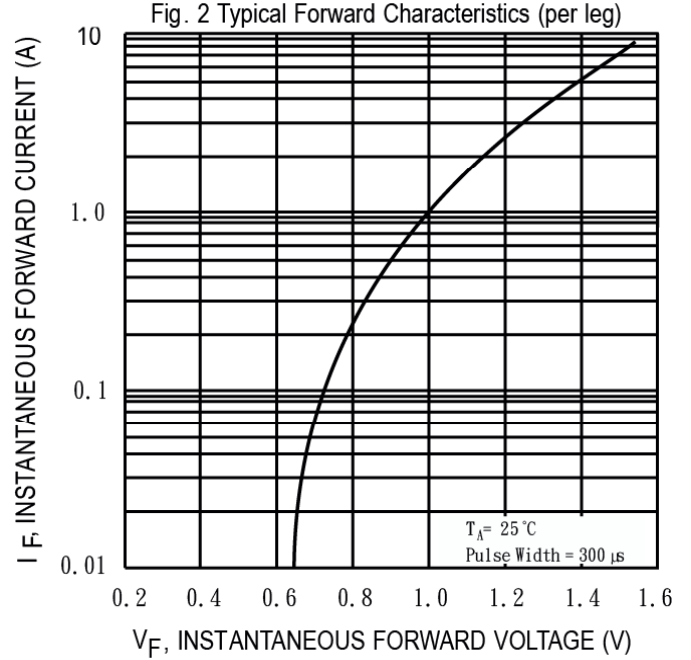
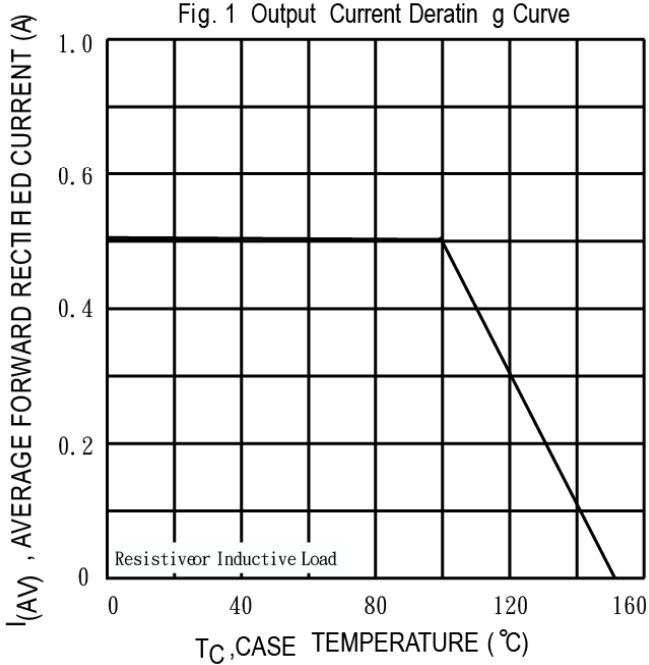
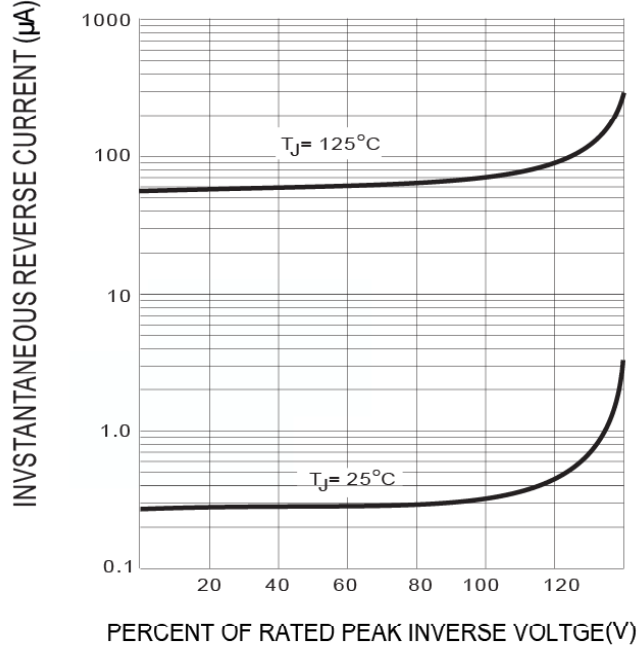


FIG.6 MOUNTING PAD LAYOUT



Rating and Characteristics Curvers

FIG.5 TYPICAL REVERSE CHARACTERISTICS



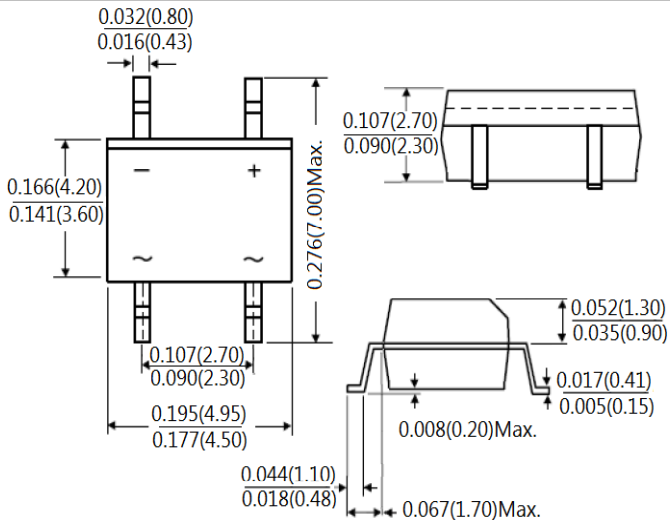


MB05SN THRU MB10SN



Surface Mount Glass Passivated Bridge Rectifier

Package Outline Dimensions

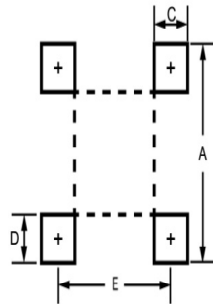


MBS

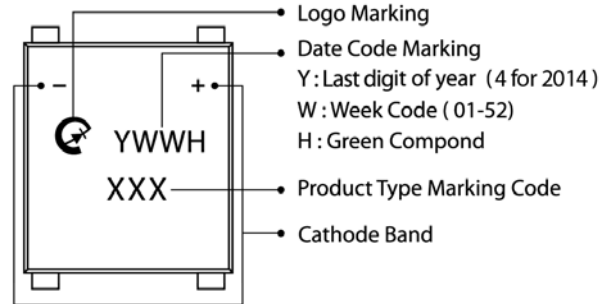
Dimensions in inches and (millimeters)

Suggested Pad Layout

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

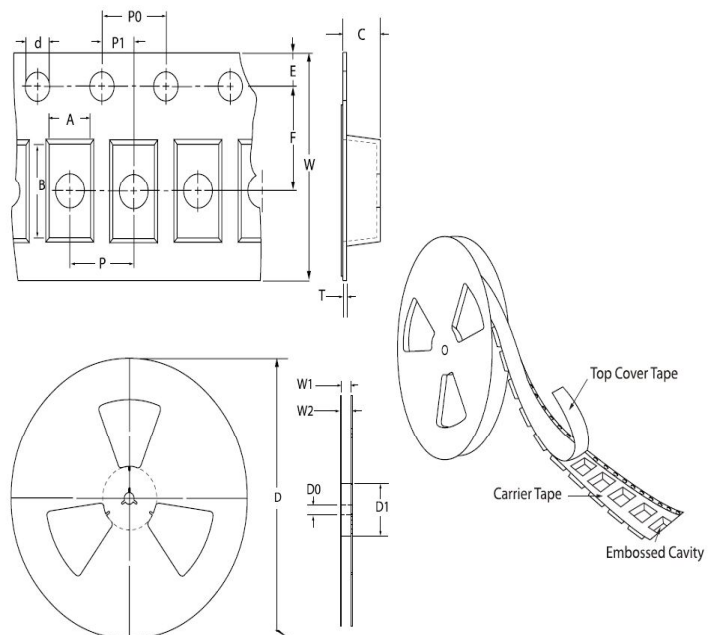


Marking Information



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	—





LEGAL DISCLAIMER

- The product is provided “AS IS” without any guarantees or warranty. In association with the product, Eris Technology Corporation, its affiliates, and their directors, officers, employees, agents, successors and assigns (collectively, the “Eris”) makes no warranties of any kind, either express or implied, including but not limited to warranties of merchantability, fitness for a particular purpose, of title, or of non-infringement of third party rights.
- The information in this document and any product described herein are subject to change without notice and should not be construed as a commitment by Eris. Eris assumes no responsibility for any errors that may appear in this document.
- Eris does not assume any liability arising out of the application or use of this document or any product described herein, any Customer or user of this document or products described herein in such applications shall assume all risks of such use and will agree to hold Eris and all the companies whose products are represented on Eris website, harmless against all damages.
- No license, express or implied, by estoppels or otherwise, to any intellectual property is granted by this document or by any conduct of Eris. Product name and markings notes herein may be trademarks of their respective owners.
- Eris does not warrant or accept any liability whatsoever in respect of any products purchased through unauthorized sales channel.
- Should Customers purchase or use Eris products for any unintended or unauthorized application, Customers shall indemnify and hold Eris and its representatives harmless against all claims, damages, expenses, and attorney fees arising out of, directly or indirectly, any claim of personal injury or death associated with such unintended or unauthorized application.
- The official text is written in English and the English version of this document is the only version endorsed by Eris. Any discrepancies or differences created in the translations are not binding and have no legal effect on Eris for compliance or enforcement purposes.