Zibo Seno Electronic Engineering Co., Ltd.

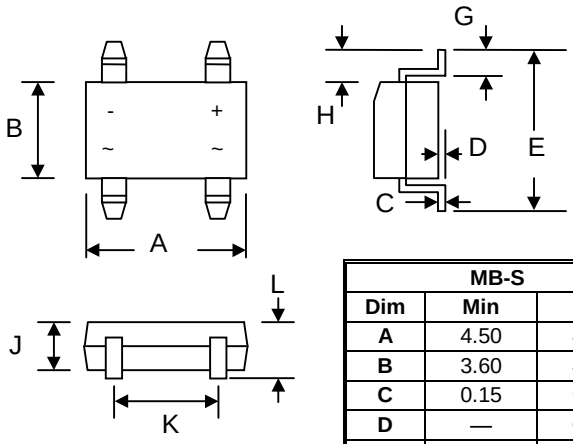
淄博圣诺

EMB1S – EMB6S

1.0A SUPER FAST SURFACE MOUNT GLASS PASSIVATED BRIDGE RECTIFIER

Features

- Glass Passivated Die Construction
- Low Forward Voltage Drop
- High Current Capability
- High Surge Current Capability
- Designed for Surface Mount Application
- Plastic Material – UL Flammability 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

Single Phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

Characteristic	Symbol	EMB1S	EMB2S	EMB4S	EMB6S	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	100	200	400	600	V
RMS Reverse Voltage	$V_{R(RMS)}$	70	140	280	560	V
Average Rectified Output Current (Note 1) @T_A = 40°C Average Rectified Output Current (Note 2) @T_A = 40°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}	35				A
I^2t Rating for Fusing (t < 8.3ms)	I^2t	5.0				A^2s
Forward Voltage per element @I_F = 1.0A	V_{FM}	0.95		1.25	1.7	V
Peak Reverse Current @T_A = 25°C At Rated DC Blocking Voltage @T_A = 125°C	I_{RM}	5.0 500				μA
Reverse Recovery Time (Note 4)	t_{rr}	35				nS
Typical Junction Capacitance per leg (Note 3)	C_j	13				pF
Typical Thermal Resistance per leg (Note 1)	$R_{\theta JA}$ $R_{\theta JL}$	62.5 25				°C/W
Operating and Storage Temperature Range	T_j, T_{STG}	-55 to +150				°C

Note: 1. Mounted on glass epoxy PC board with 1.3mm^2 solder pad.
2. Mounted on aluminum substrate PC board with 1.3mm^2 solder pad.
3. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.
4. Measured with IF = 0.5A, IR = 1.0A, IRR = 0.25A. See figure 5.