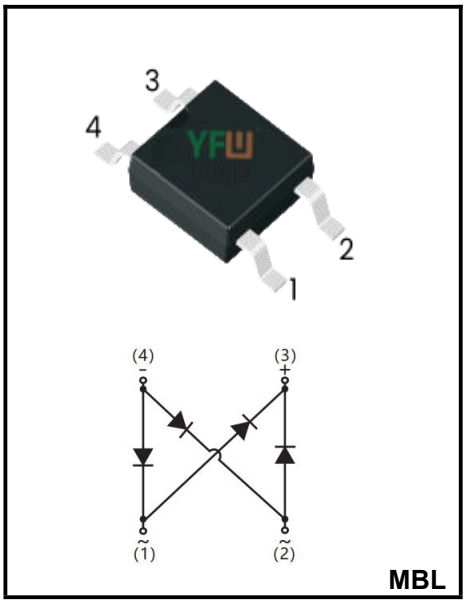
1A SURFACE MOUNT GLASS PASSIVATED BRIDGE RECTIFIER

Reverse Voltage - 100 to 1000 V

Forward Current - 1A



FEATURES

- Glass Passivated Chip Junction
- High Surge Current Capability
- Designed for Surface Mount Application

MECHANICAL DATA

- Case: MBL
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 75mg/0.0026oz

Maximum Ratings and Electrical characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.
Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20 %.

Parameter	Symbols	MBL1	MBL2	MBL4	MBL6	MBL8	MBL10	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	100	200	400	600	800	1000	V
Maximum RMS voltage	V_{RMS}	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current @ Fig.1	$I_{F(AV)}$	1.0						A
Peak Forward Surge Current,8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	35						A
Peak Forward Surge Current,1.0ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	70						A
I^2t Rating for fusing (3ms≤t≤8.3ms)	I^2t	5.0						A^2S
Max Instantaneous Forward Voltage at 1 A	V_F	1.1						V
Maximum DC Reverse Current @T_A=25°C at Rated DC Blocking Voltage @T_A=100°C	I_R	5 100						μA
Typical Junction Capacitance (1)	C_j	7						pF
Typical Thermal Resistance (2)	$R_{\theta JA}$ $R_{\theta JC}$ $R_{\theta JL}$	45 15 25						°C/W
Operating and Storage Temperature Range	T_j	-55 ~ +150						°C
Storage Temperature Range	T_{stg}	-55 ~ +150						°C

(1) Measured at 1 MHz and applied reverse voltage of 4 V D.C

(2) Mounted on glass epoxy PC board with 4×1.5"×1.5" (3.81×3.81 cm) copper pad.

Fig.1 Average Rectified Output Current Derating Curve

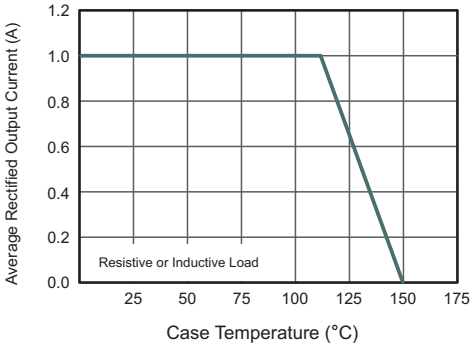


Fig.2 Typical Instaneous Reverse Characteristics

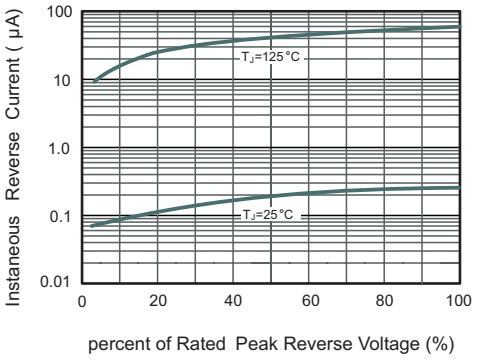


Fig.3 Typical Forward Characteristic

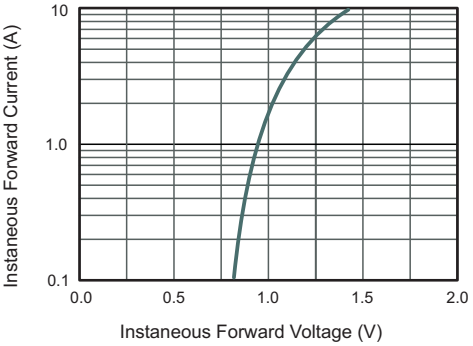


Fig.4 Typical Junction Capacitance

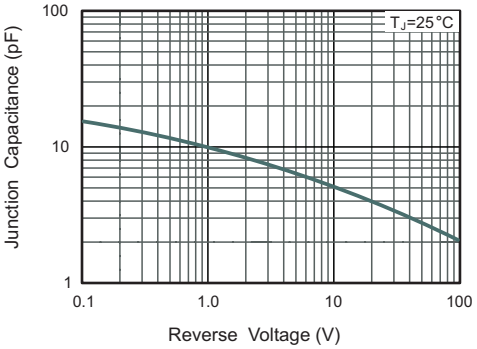
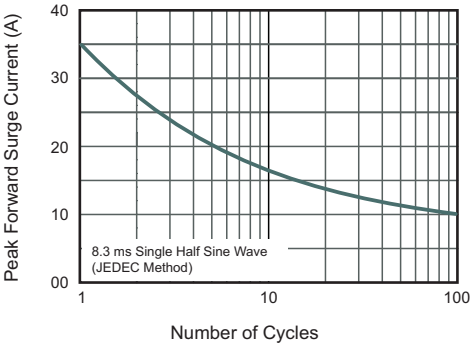
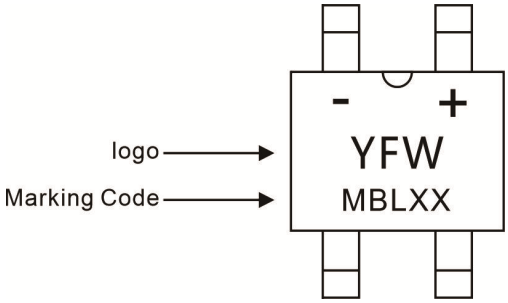


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current



Marking Diagram

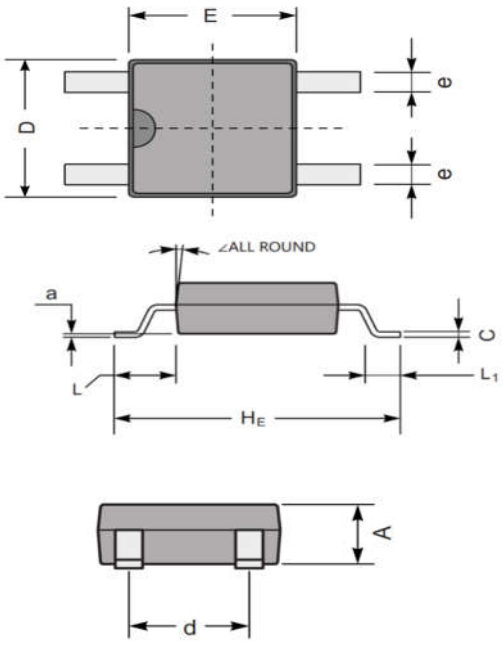


Ordering information

Package	Packing Description	Packing Quantity
MBL	Tape/Reel,13"reel	5000PCS/Reel 50000PCS/Carton

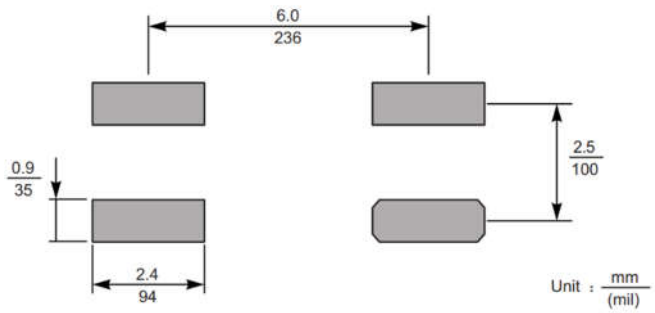
Package Dimensions

MBL



Dim.	Millimeter(mm)		(mil)	
	Min.	Max.	Min.	Max.
A	1.2	1.6	47	63
C	0.15	0.25	5.9	5.9
D	3.45	3.95	136	156
E	3.6	4.1	142	161
H_E	6.4	7.0	252	276
d	2.3	2.7	91	106
e	0.5	2.3	20	31
L	1.3	1.7	51	67
L1	0.5	1.1	20	43
a	0.2		8	
∠	7°			

The recommended mounting pad size



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