



**Bridge Rectifiers**  
**Reverse Voltage-1000v**  
**Forward current-3A**

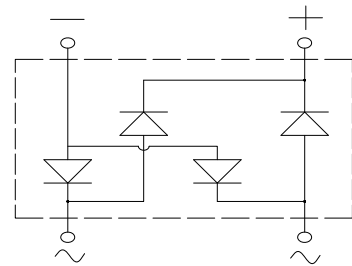
**Features**

- Glass passivated chip
- High surge current capability
- Ideal for surface mounted applications
- Low power loss, high efficiency
- Plastic Case Material has UL Flammability



**Mechanical Data**

- Package: MSB
- Terminals: Tin Plated leads, solderable per Mil-STD-750 Method 2026
- Polarity: As marked
- Molding compound meets UL 94 V-0 flammability rating, ROHS-compliant



**Maximum Ratings (Ta=25°C Unless otherwise)**

Type Number	SYMBOL	MSB310	Umit
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	1000	V
Maximum RMS Voltage	$V_{RMS}$	700	V
Maximum DC Blocking Voltage	$V_{DC}$	1000	V
Maximum Average Forward Rectified Current at TL = 100 °C	$I_{O(AV)}$	3.0	A
Peak Forward Surge Current 8.3ms Single half-sine-wave superimposed on rated load(JEDEC Method) on rated	IFSM	90.0	A
Forward Surge Current (Non-repetitive) @1ms, square wave, 1 cycle, Tj=25°C		180.0	A
Current squared time @1ms≤t8.3≤ms Tj=25°C, Rating of per diode	$I^2t$	33.6	A <sup>2</sup> S
Maximum Forward Voltage at 3.0A DC	$V_{FM}$	1.1	V
Maximum Reverse Current TA = 25°C	IR	5	uA
at Rated DC Blocking Voltage TA = 100°C		100	
Typical Junction Capacitance	CJ	40	pF
Typical Thermal Resistance	$R_{QJa}$	75.0	°C/W
Operating Junction Temperature Range	$T_J$	-55to+150	°C
Storage Temperature Range	$T_{STG}$	-55to+150	°C



FIG. 1 MAXIMUM AVERAGE FORWARD CURRENT DERATING

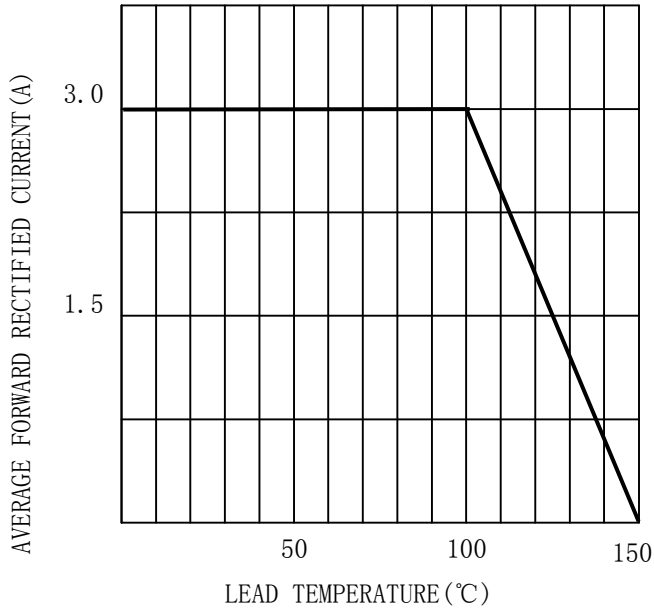


FIG. 2 TYPICAL FORWARD CHARACTERISTICS

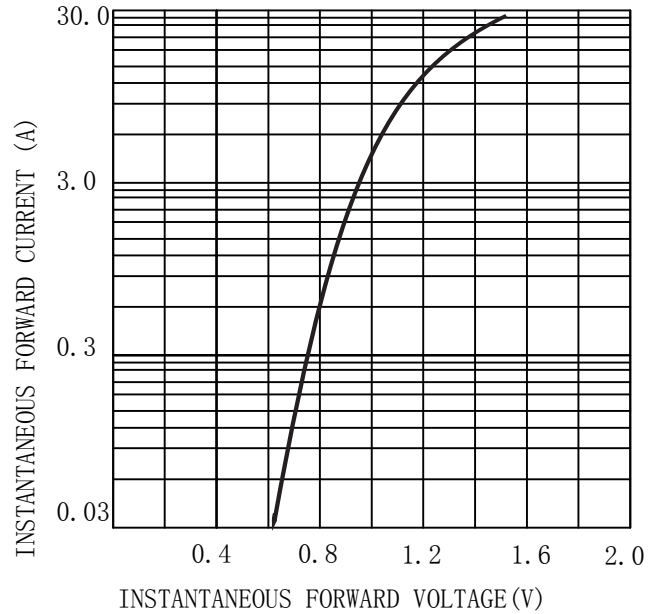


FIG. 3 MAXIMUM NON-REPEITIVE SURGE CURRENT

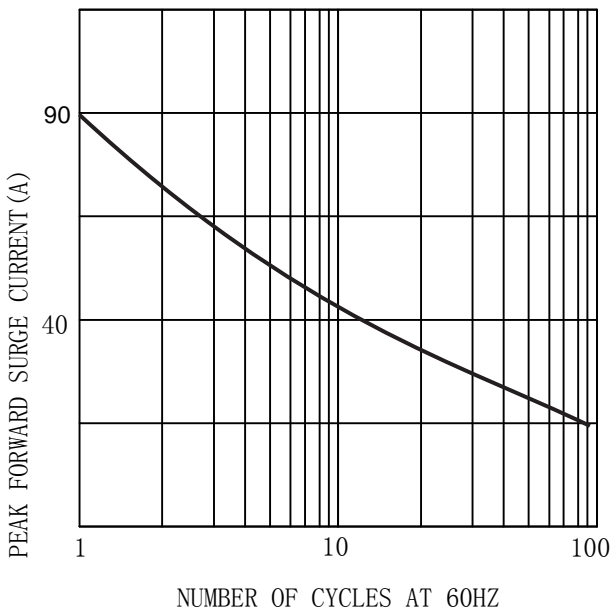
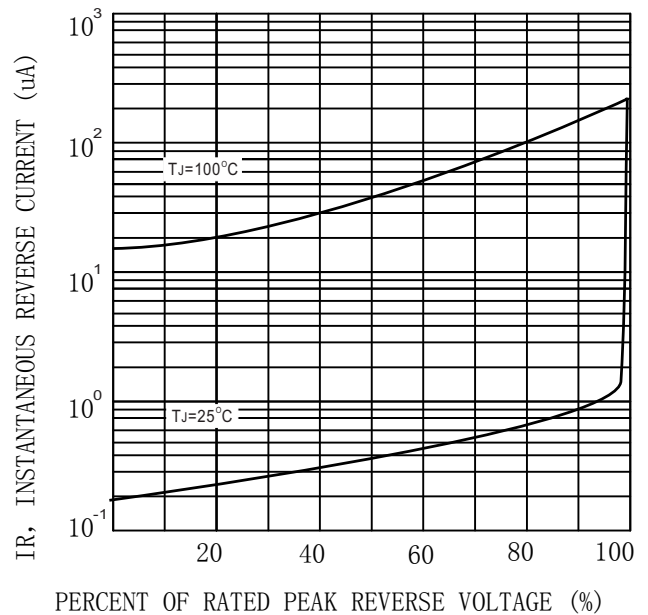


FIG. 4 TYPICAL REVERSE CHARACTERISTICS (per element)





## MARKING INFORMATION



= Logo

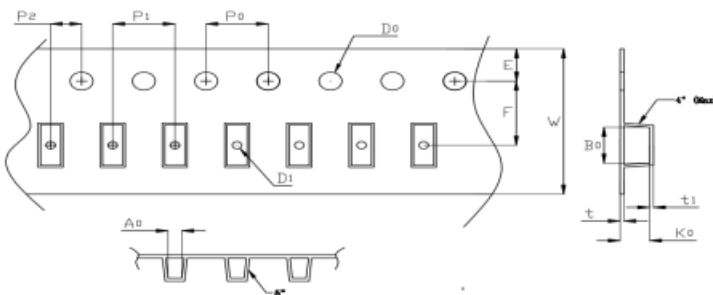
\*\*\*\* = Date Code Marking

MSB310 = Marking Code

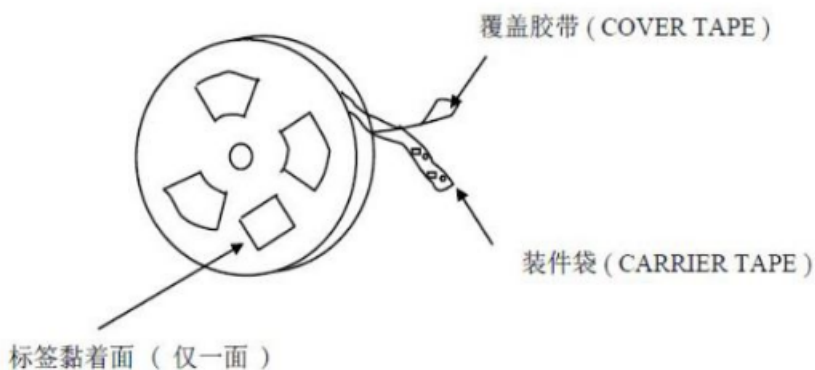
Print according to customer request

## PACKING REQUIRMENTS

- Carrier tape packing



Specifications	Carrier tape type	Ao	Bo	Ko	Po	W	t1	Explain
MSB	Anti-static	7.0±0.10	8.7±0.10	1.65±0.10	4.00±0.10	16.0±0.30	0.28±0.05	

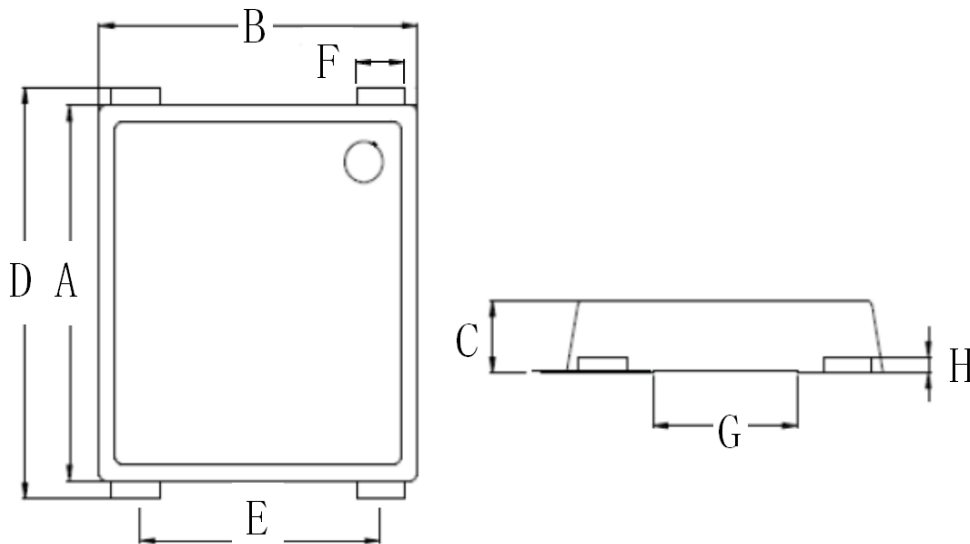


DEVICE TYPE	Tape width	13" Reel		
		Q'TY/REEL (pcs)	BOX/CARTOON	Q'TY/REEL (pcs)
MSB	16mm	3000	6000	60000



## Outline Dimensions

MSB



MSB				
DIM	INC HES		MM	
	MIN	MAX	MIN	MAX
A	0.28	0.29	7.0	7.4
B	0.26	0.27	6.5	6.9
C	0.05	0.06	1.2	1.6
D	0.32	0.35	8.2	8.8
E	0.19	0.21	4.9	5.3
F	0.04	0.05	0.9	1.3
G	0.11	0.13	2.8	3.2
H	0.01	0.02	0.2	0.4



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