



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

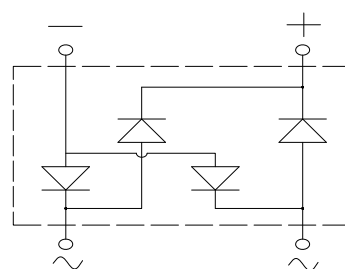
Features

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℃ Unless otherwise specified)

Type Number	SYMBOL	MSB310	Unit
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 $T_L = 100^\circ\text{C}$	$I_{O(AV)}$	3.0	A
Peak Forward Surge Current 8.3ms Single half-sine-wave superimposed on rated load(JEDEC Method) on rated	IFSM	80.0	A
Forward Surge Current (Non-repetitive) @1ms, square wave, 1 cycle, $T_J = 25^\circ\text{C}$		160.0	A
Current squared time @1ms≤t≤8.3ms $T_J = 25^\circ\text{C}$, Rating of per diode	I^2t	26.6	A ² S
Maximum Forward Voltage at 3.0A DC	V_{FM}	1.1	V
Maximum Reverse Current $T_A = 25^\circ\text{C}$	IR	5	uA
at Rated DC Blocking Voltage $T_A = 100^\circ\text{C}$		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

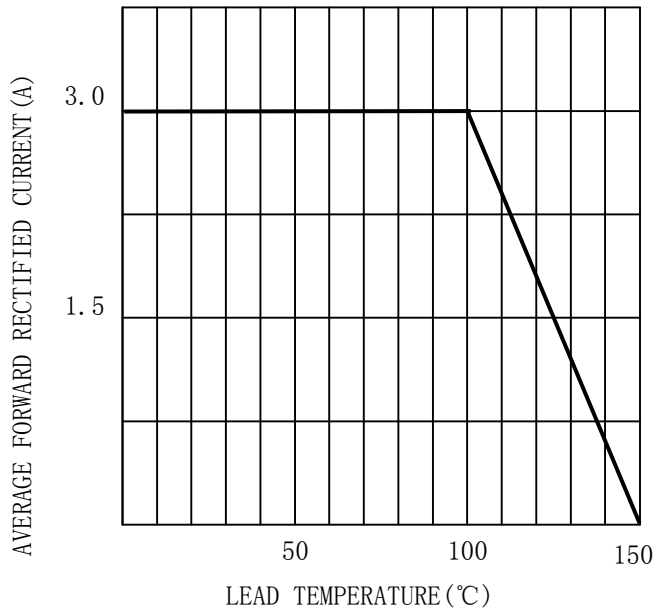


FIG. 2 TYPICAL FORWARD CHARACTERISTICS

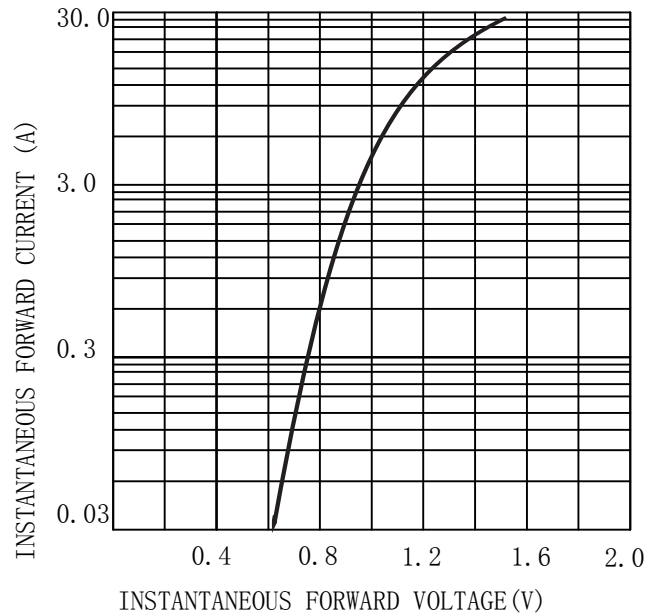


FIG. 3 MAXIMUM NON-REPEITIVE SURGE CURRENT

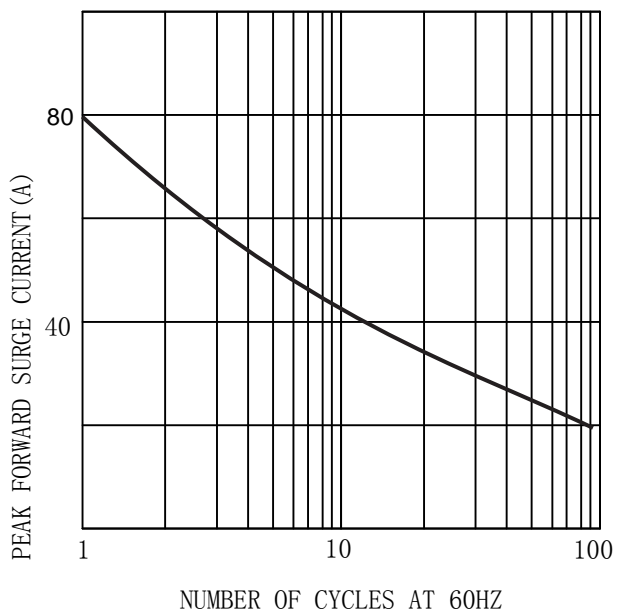
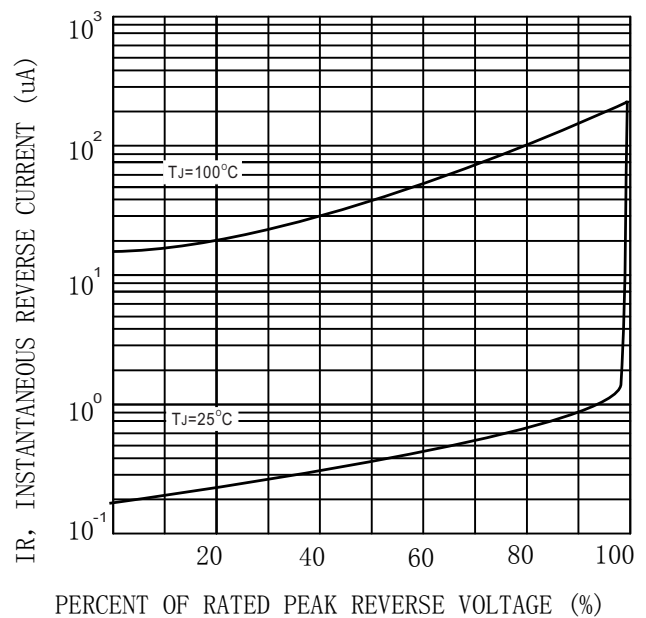


FIG. 4 TYPICAL REVERSE CHARACTERISTICS (per element)





MARKING INFORMATION



= Logo

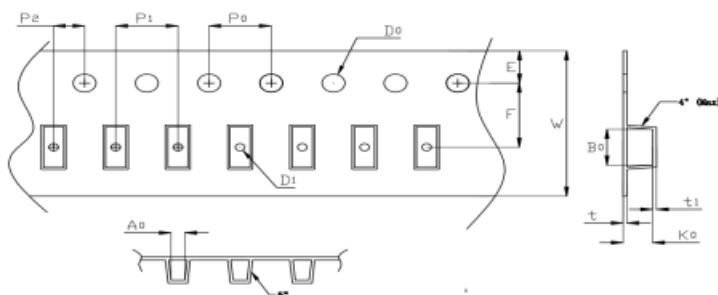
= Date Code Marking

MSB310 = Marking Code

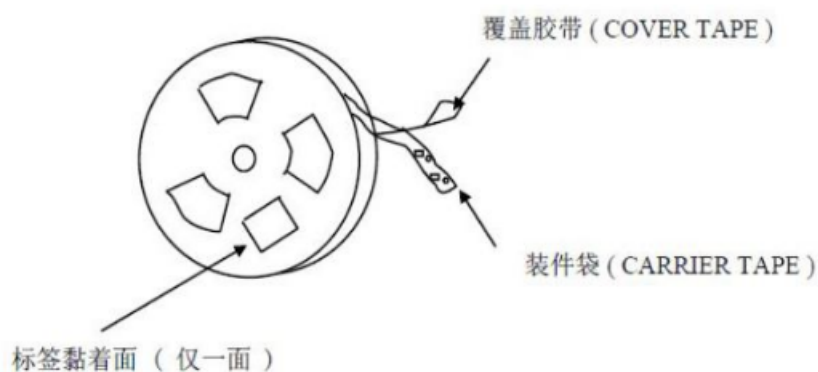
Print according to customer request

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	

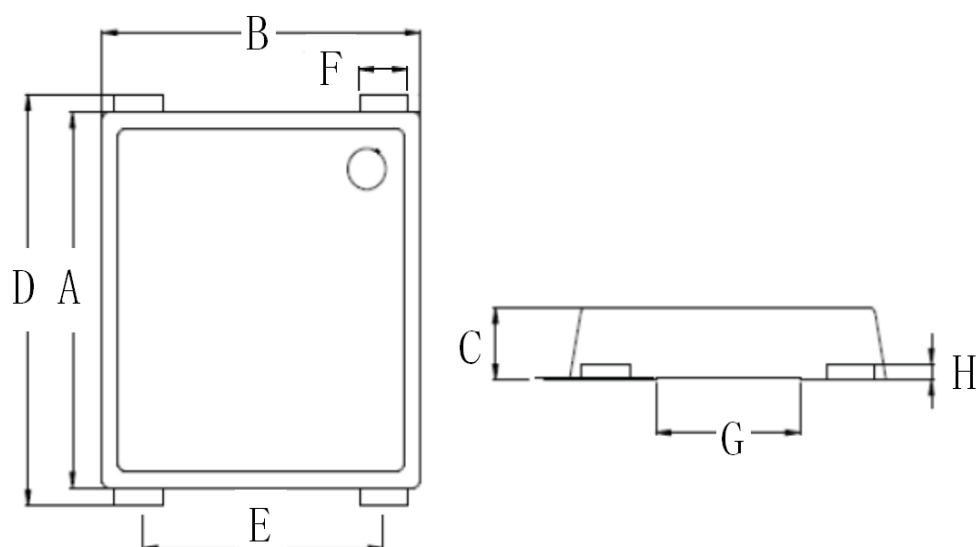


DEVICE TYPE	Tape width	13" Reel		
		Q'TY/REEL (pcs)	BOX/CARTON	Q'TY/REEL (pcs)
MSB	16mm	3000	6000	60000



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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