

BRESD24VM1B2SB

Rev.A May.-2024

/ Descriptions

SOD-323

ESD

SOD-323 Plastic Package 1-Line,Bi-directional , ESD Protection Diode.

/ Features

1ns

30KV

IEC61000-4-2

4

ESD

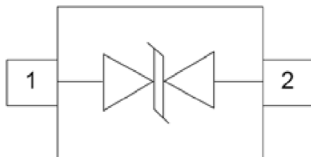
Ultra small package, Response Time is Typically < 1 ns, ESD > 30 kV per Human Body Model,IEC61000-4-2 Level 4 ESD Protection,HF Product.

/ Applications

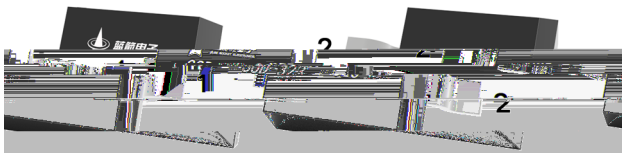
MP3

Suitable for cellular phones audio,MP3 players, Digital cameras, Portable devices, mobile telephone and other users.

/ Equivalent Circuit



/ Pinning



/ Marking

See Marking Instructions.

/ Absolute Maximum Ratings

Parameter	Symbol	Rating	Unit
Peak Pulse Power($t_p = 8/20\mu s$)	P_{PK}	350	W
Peak Pulse Current($t_p = 8/20\mu s$)	I_{PP}	8	A
ESD according to IEC61000-4-2 air discharge	V_{ESD}	± 30	KV
ESD according to IEC61000-4-2 contact discharge		± 30	
Junction temperature	T_J	-55~+125	
Storage Temperature	T_{STG}	-55~+150	

/ Electrical Characteristics($T_a=25^\circ C$)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Reverse maximum working voltage	V_{RWM}				24	V
Reverse leakage current	I_R	$V_{RWM} = 24V$			1	μA
Reverse breakdown voltage ¹⁾	V_{BR}	$I_T=1mA$	26.7		33	V
Clamping voltage ²⁾	V_{CL}	$I_{PP} = 5A \quad t_p = 8/20\mu s$			40	V
		$I_{PP} = 8A \quad t_p = 8/20\mu s$			44	V
Junction Capacitance	C_J	$V_R = 0V \quad f = 1MHz$			50	pF

Notes:

1) V_{BR} is measured with a pulse test current I_T at an ambient temperature of $25^\circ C$.

2) Non-repetitive current pulse, according to IEC61000-4-5.

/ Electrical Characteristic Curve(Ta=25)

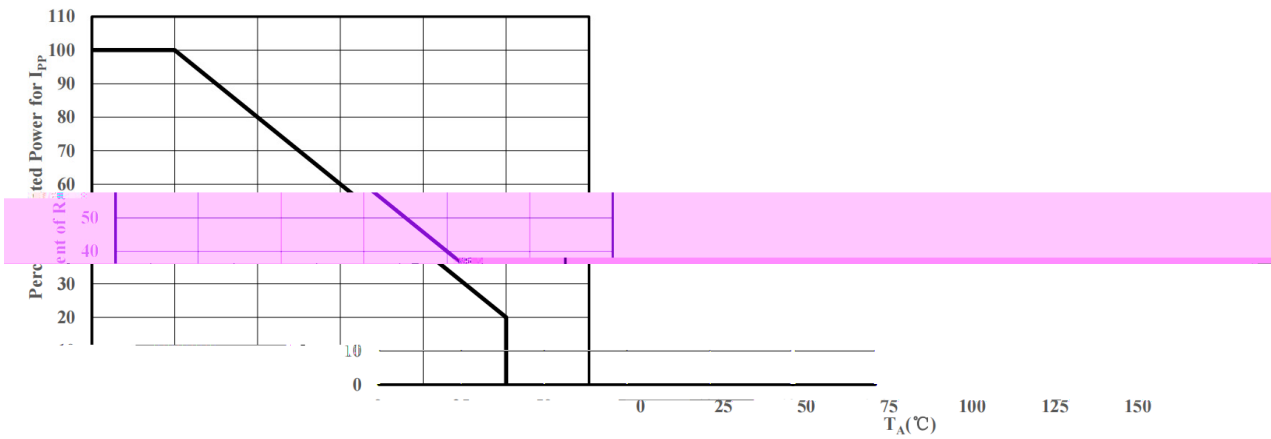
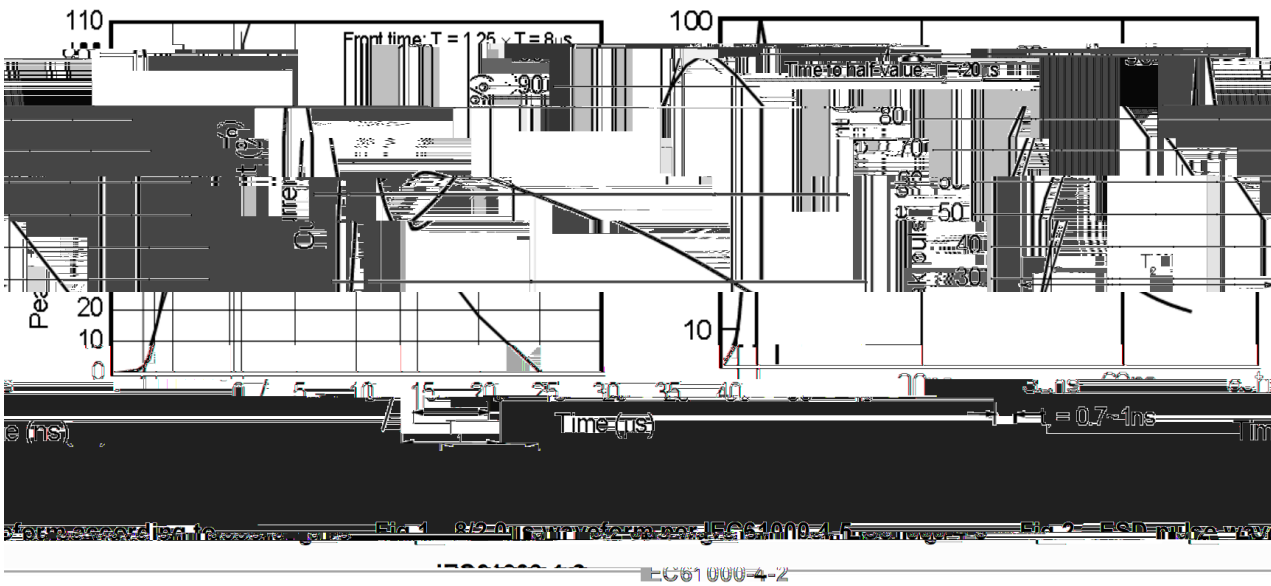
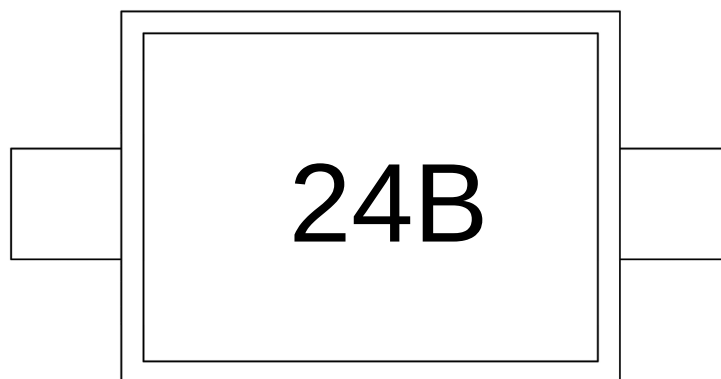


Fig 3 Power Derating Curve

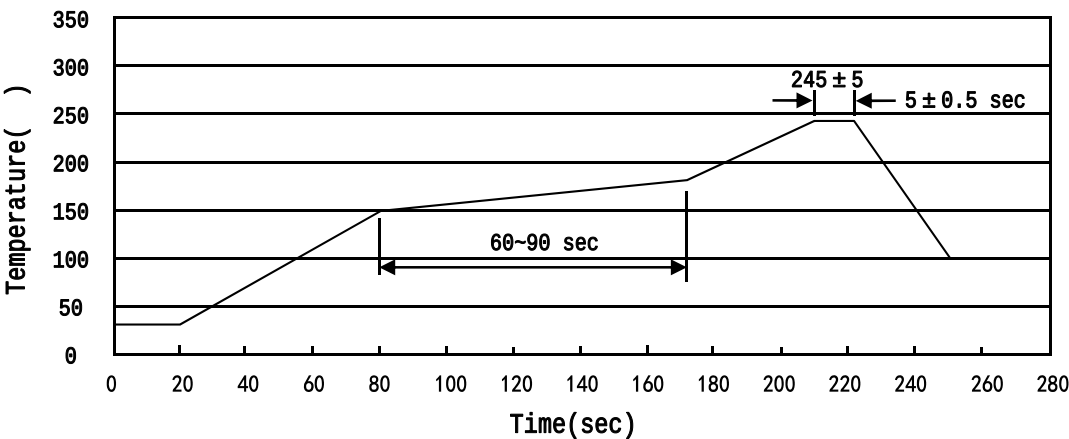


24B:

Note:

24B Product Type Code

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Note:

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|---|-------|-----|----|-----------|---|
| 1 | 150 | 180 | 60 | 90sec; | 1.Preheating:150~180 , Time:60~90sec. |
| 2 | 245±5 | | | 5±0.5sec; | 2.Peak Temp.:245±5 , Duration:5±0.5sec. |
| 3 | | 2 | 10 | /sec. | 3. Cooling Speed: 2~10 /sec. |

/ Resistance to Soldering Heat Test Conditions

260±5 10±1 sec. Temp.:260±5 Time:10±1 sec

/ Packaging SPEC.

/ REEL

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm ³)		
	Units/Reel 只/卷盘	Reels/Inner Box 卷盘/盒	Units/Inner Box 只/盒	Inner Boxes/Outer Box 盒/箱	Units/Outer Box 只/箱	Reel	Inner Box 盒	Outer Box 箱
SOD-323	3,000	10	30,000	6	180,000	7 ×8	180×120×180	390×385×205

/ Notices