

/ Descriptions

SOD-323

ESD

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

/ Features

1ns

30KV

IEC61000-4-2

4

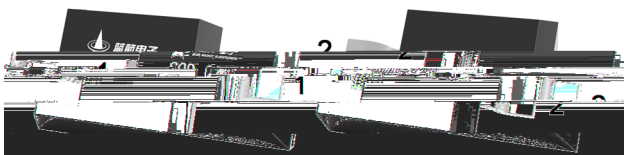
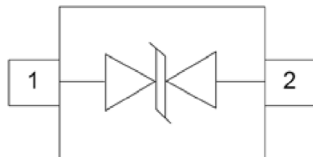
ESD

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.



/ Marking

See Marking Instructions.

/ Absolute Maximum Ratings

Parameter	Symbol	Rating	Unit
Peak Pulse Power($t_p = 8/20 \text{ s}$)	P_{PK}	320	W
Peak Pulse Current($t_p = 8/20 \text{ s}$)	I_{PP}	5	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~+150	
Storage Temperature	T_{STG}	-55~+150	

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

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Reverse maximum working voltage	V_{RWM}				36	V
Reverse leakage current	I_R	$V_{RWM} = 24V$			1	μA
Reverse breakdown voltage ¹⁾	V_{BR}	$I_T=1mA$	40			V
Clamping voltage ²⁾	V_{CL}	$I_{PP} = 1A \quad t_p = 8/20 \text{ s}$			60	V
		$I_{PP} = 5A \quad t_p = 8/20 \text{ s}$			75	V
Junction Capacitance	C_J	$V_R = 0V \quad f = 1MHz$		15	20	pF

Notes:

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

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

/ Electrical Characteristic Curve(Ta=25)

Fig.1 ESD Clamping Voltage Screenshot
Positive 8 kV Contact perIEC61000-4-2

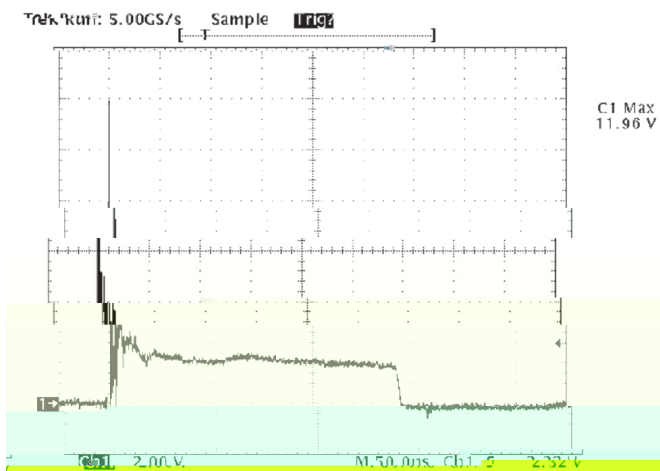
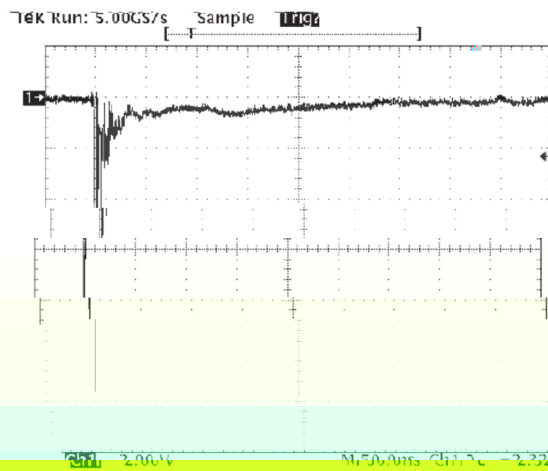
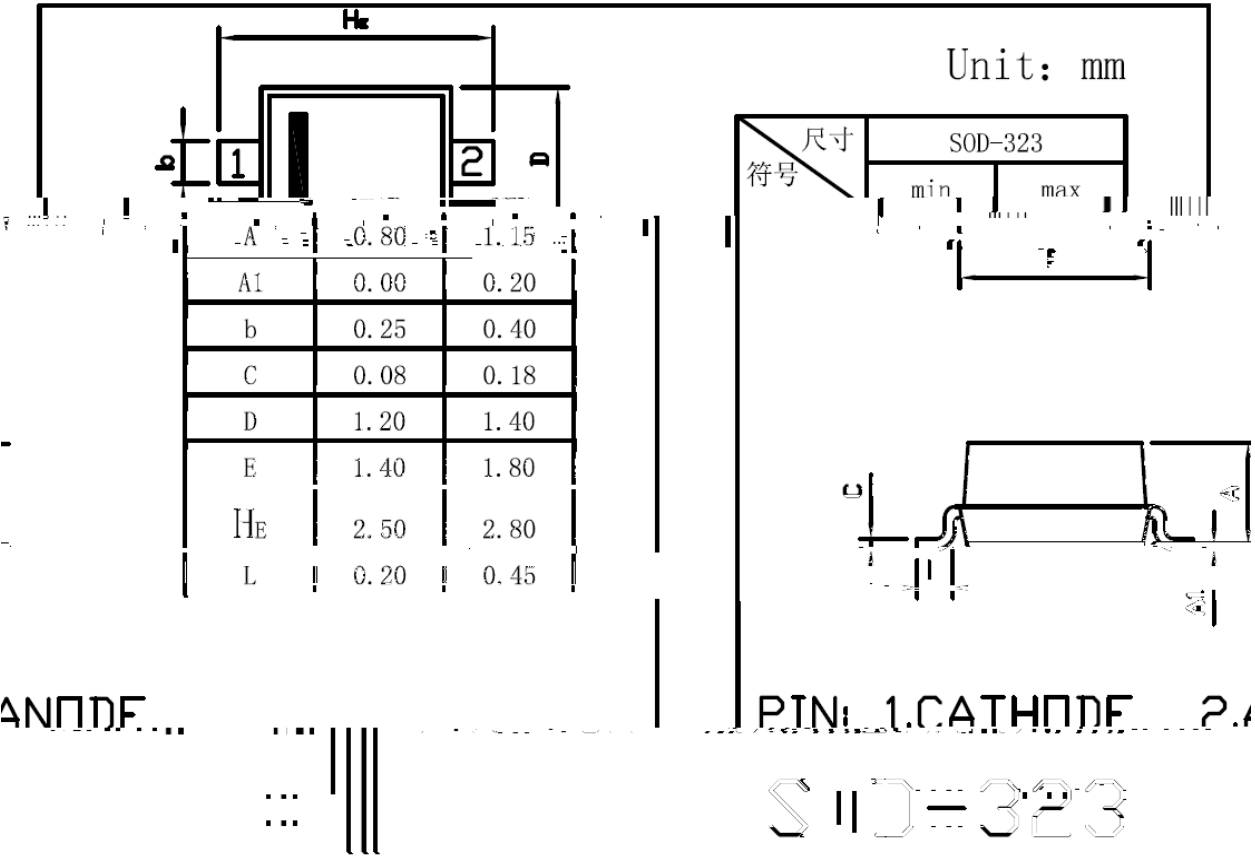


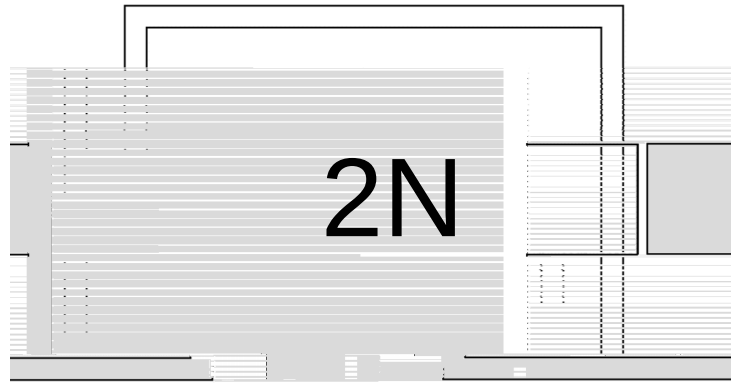
Fig.2 ESD Clamping Voltage Screenshot
Negative 8 kV Contact perIEC61000-4-2



/ Package Dimensions



/ Marking Instructions

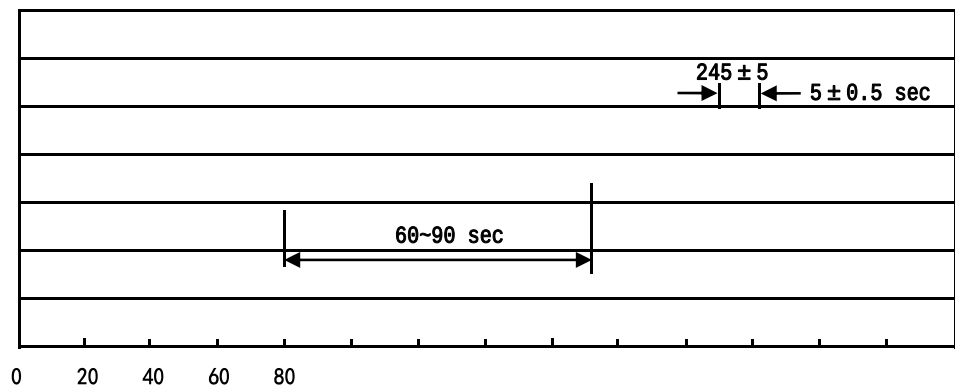


2N:

Note:

2N Product Type Code

() / Temperature Profile for IR Reflow Soldering(Pb-Free)



Note:

- 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	Units					Dimension (unit mm ³)		
	Units/Reel	Reels/Inner Box	Units/Inner Box	Inner Boxes/Outer Box	Units/Outer Box	Reel	Inner Box	Outer Box
SOD-323	3,000	10	30,000	6	180,000	7" ×8	180×120×180	390×385×205

/ Notices