

BRES3V3X1C2ZP

Rev.B Aug.-2025

/ Descriptions

DFN1006-2L ESD
DFN1006-2L Plastic Package 1-Line,Bi-directional , ESD Protection Diode.

/ Features

1ns 20KV IEC61000-4-2 4 ESD

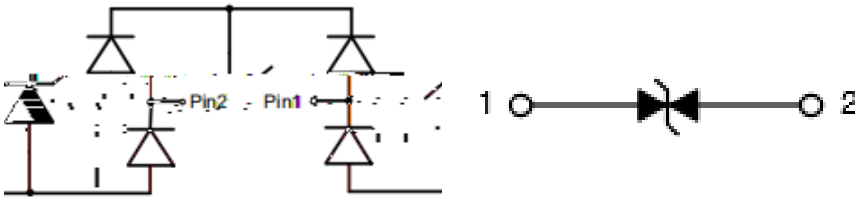
Ultra small package, Response Time is Typically<1ns, ESD>20kV per Human Body Model,IEC61000-4-2 Level 4 ESD Protection,HF Product.

/ Applications

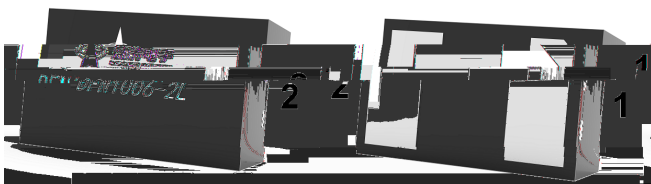
MP3

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}	60	W
Peak Pulse Current($t_p = 8/20\mu s$)	I_{PP}	3.5	A
ESD according to IEC61000-4-2 air discharge	V_{ESD}	± 20	KV
ESD according to IEC61000-4-2 contact discharge		± 15	
Junction temperature	T_J	-55~+125	
Storage Temperature	T_{STG}	-55~+150	

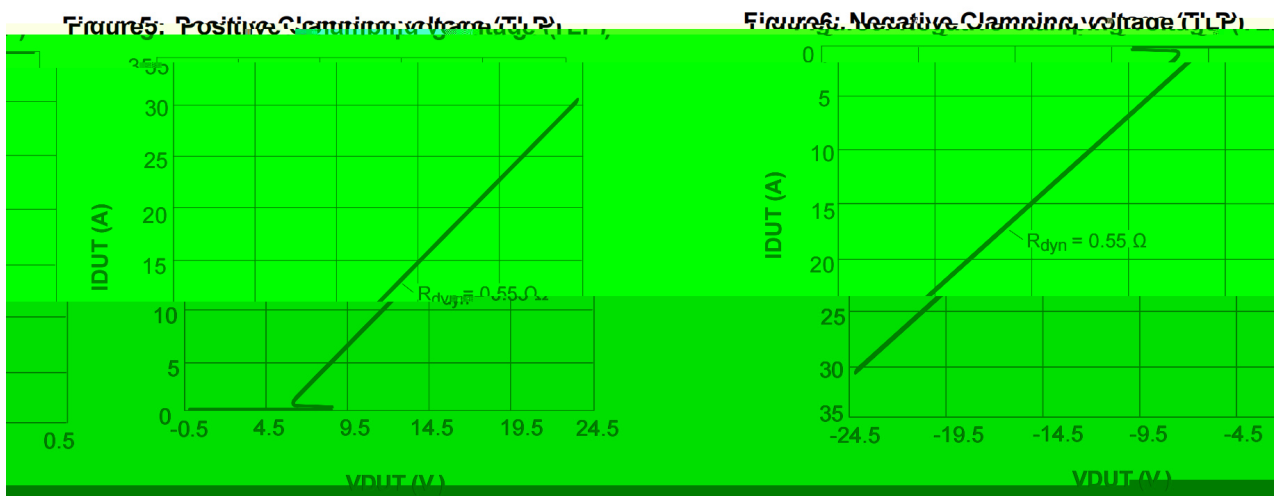
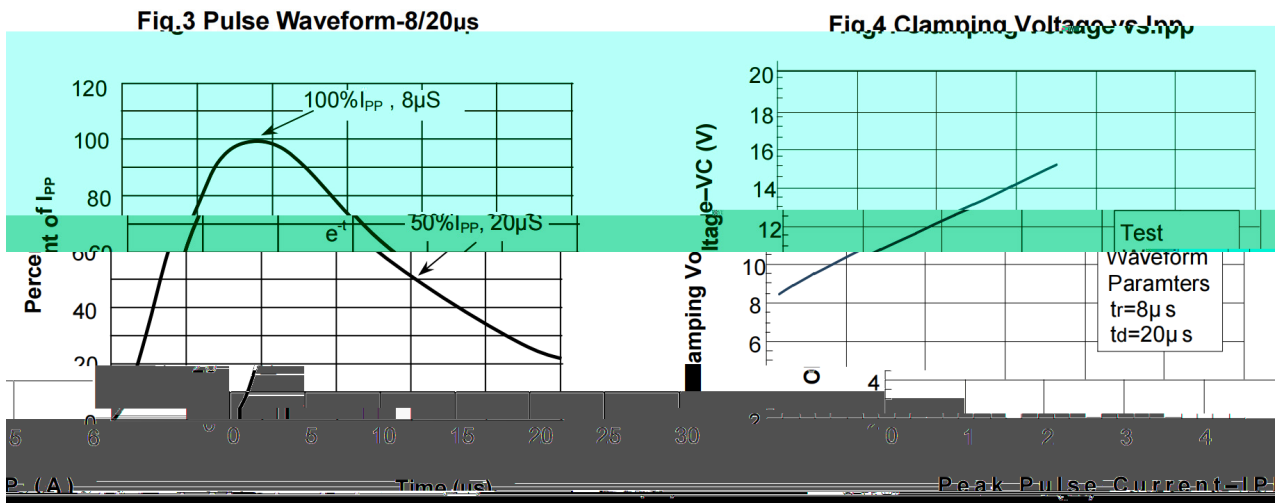
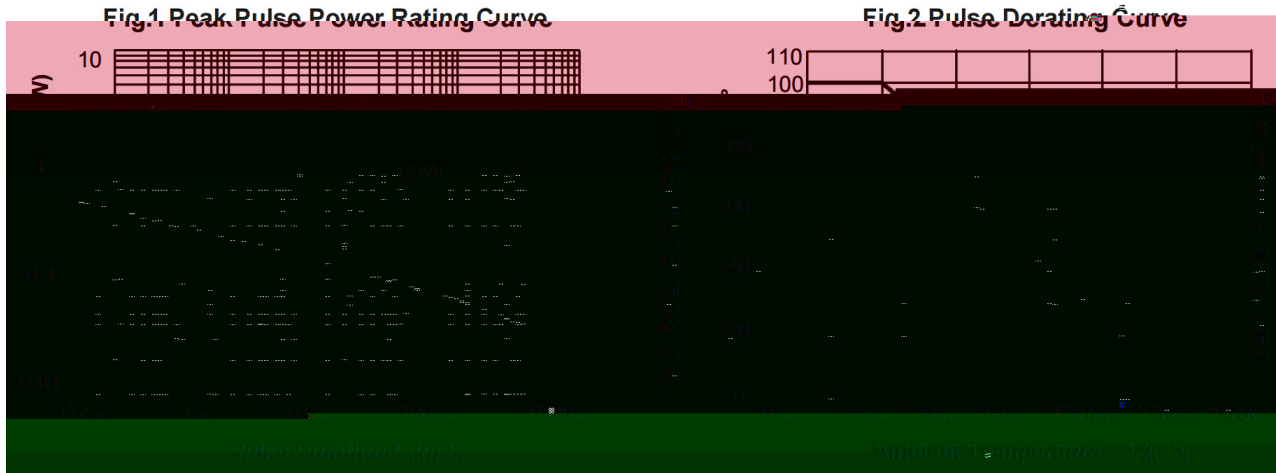
/ Electrical Characteristics($T_a=25$)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Reverse maximum working voltage	V_{RWM}				3.3	V
Reverse leakage current	I_R	$V_{RWM} = 3.3V$			100	nA
Reverse breakdown voltage ¹⁾	V_{BR}	$I_T=1mA$	4.2			V
Clamping voltage	V_C	$I_{PP} = 3.5A \quad t_p = 8/20\mu s$		15		V
Clamping voltage(TLP)		$I_{PP} = 16A \quad T_p = 100ns$			15	V
Dynamic Resistance	R_{dyn}	$T_P=100ns$		0.55		
Junction Capacitance	C_J	$V_R=0V \quad f=1MHz$		0.3		pF

Notes:

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

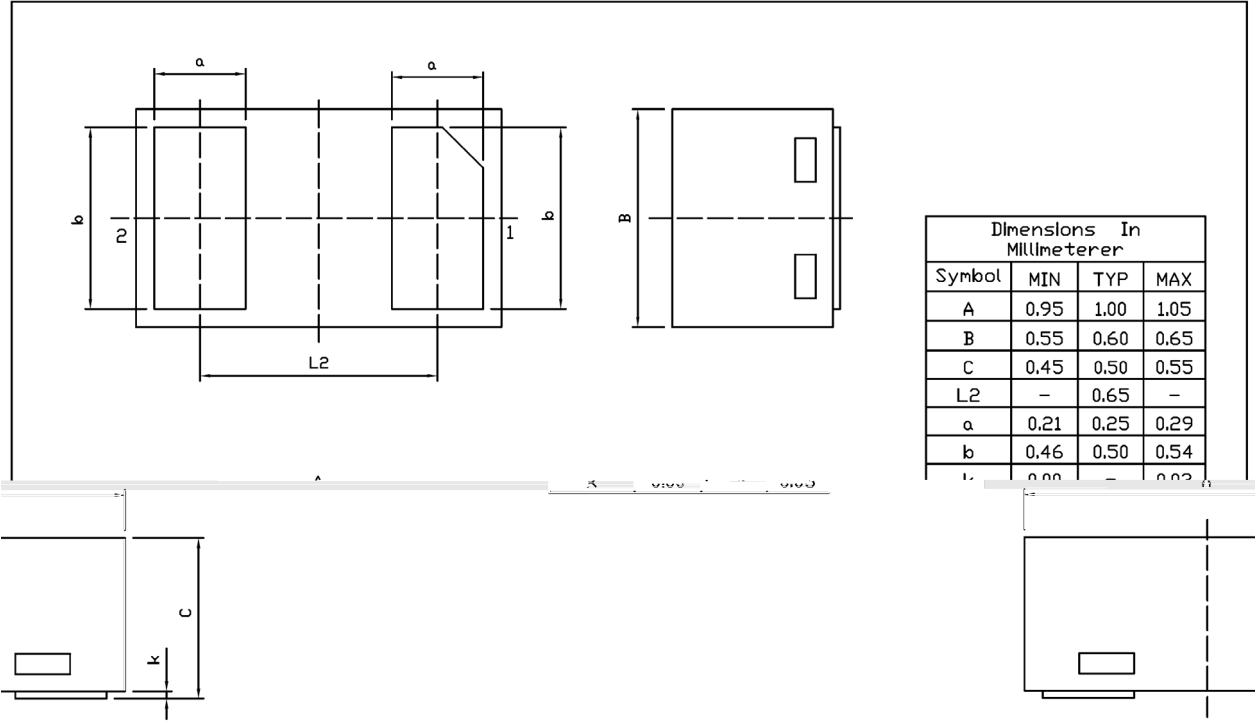
/ Electrical Characteristic Curve(Ta=25)



/ Package Dimensions

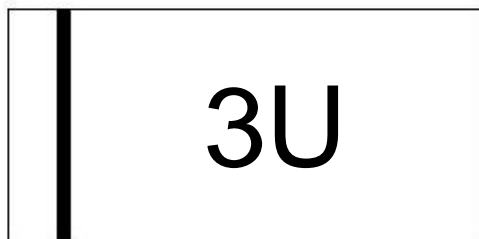
DFN1006-2L

Unit:mm



Rev.01 202108

/ Marking Instructions

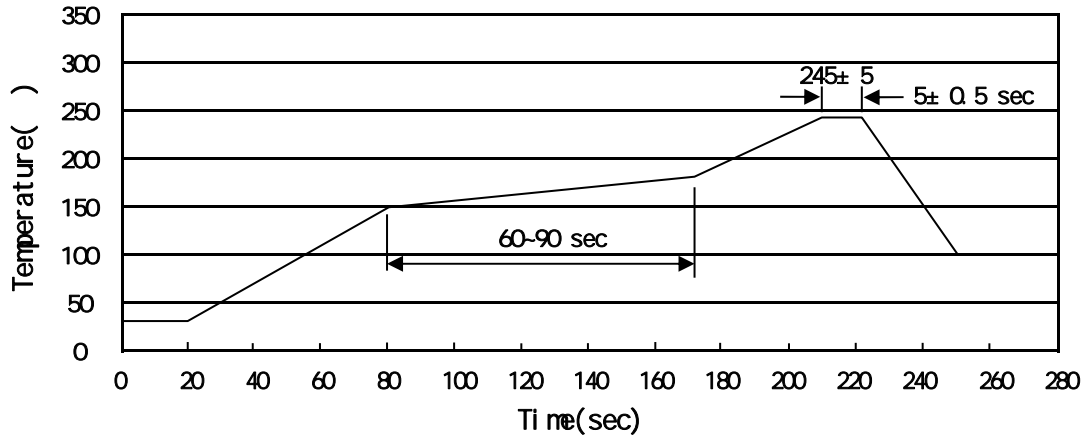


3U

Note

3U Product Type Code

() /



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
DFN1006-2L	10,000	10	100,000	6	600,000	7 x8	180x120x180	390x385x205

/ Notices