

/ Descriptions

DFN1610-2L

ESD

DFN1610-2L Plastic Package 1-Line,Uni-directional , ESD Protection Diode.

/ Features

1ns

30KV

IEC61000-4-2

4

ESD

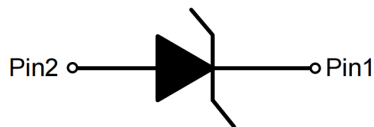
Ultra small package, Response Time is Typically < 1 ns, ESD > 30 kV per Human Body Model,IEC61000-4-2 Level 4 ESD Protection,HF Product.

/ Applications

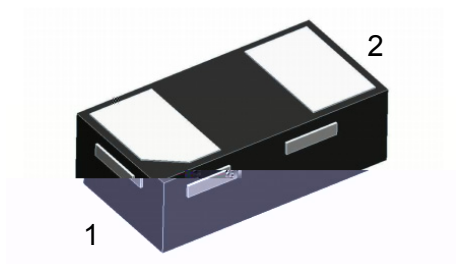
MP3

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

/ Equivalent Circuit



/ Pinning



/ Marking

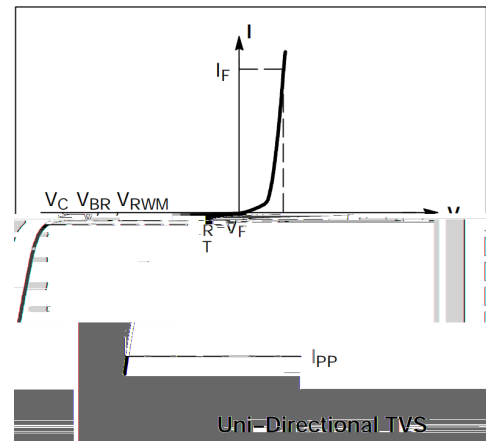
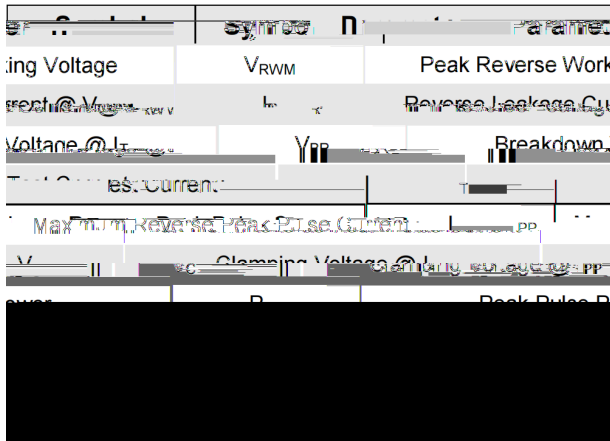
See Marking Instructions.

/ Absolute Maximum Ratings

Parameter	Symbol	Rating	Unit
Peak Pulse Current($t_p = 8/20\mu s$)	I_{PP}	80	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	125	
Storage Temperature	T_{STG}	-55~+150	

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

Electrical performance curve



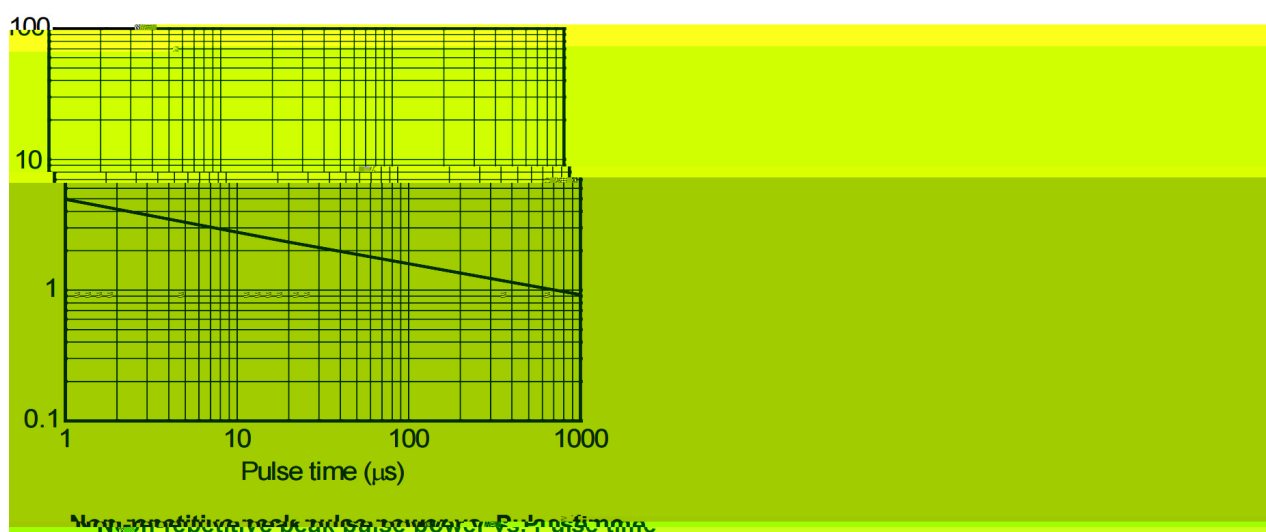
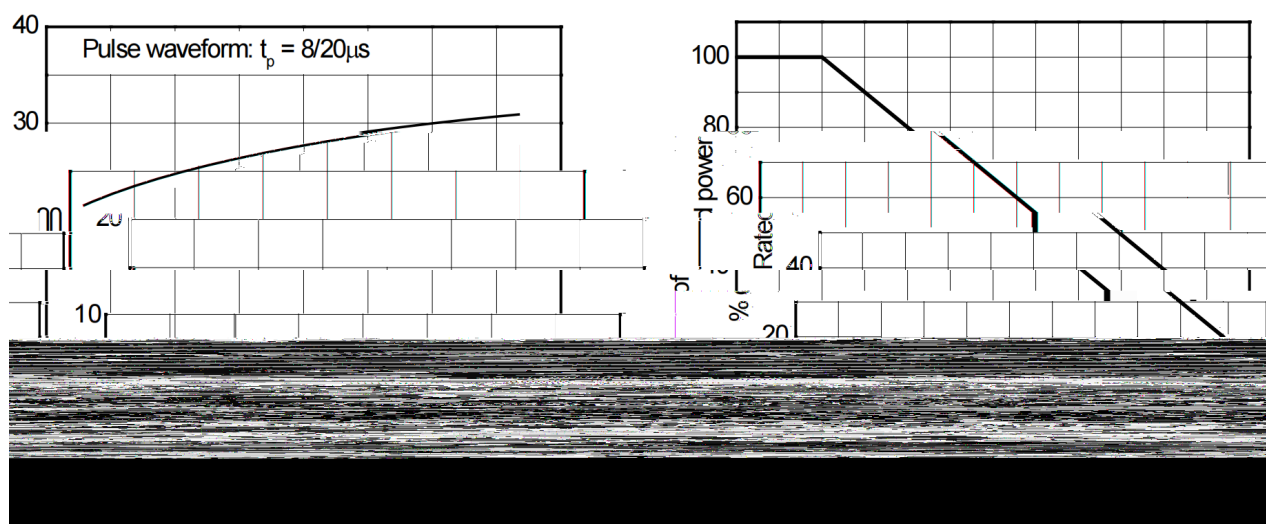
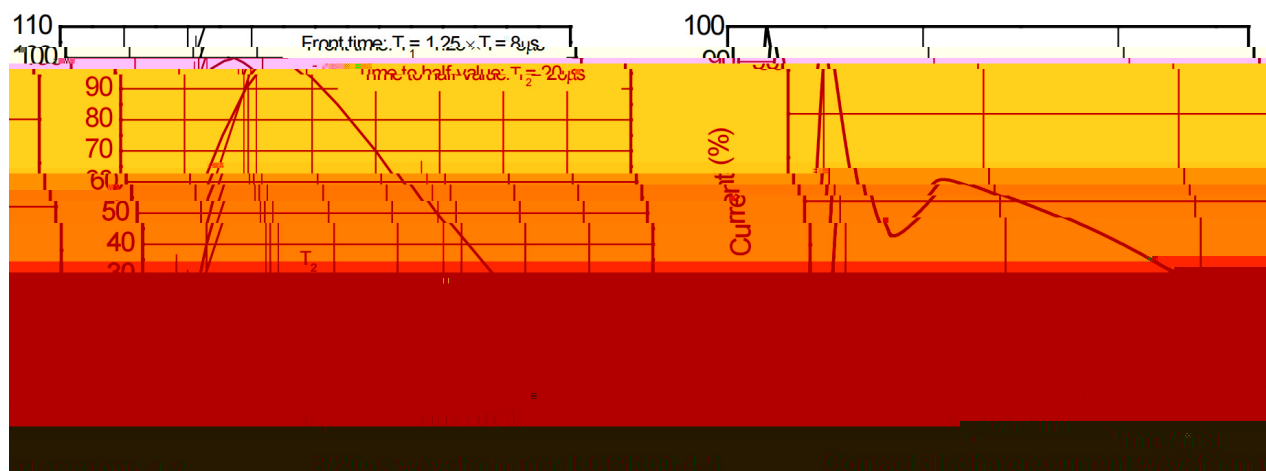
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Reverse maximum working voltage	V_{RWM}				24	V
Reverse leakage current	I_R	$V_R = 24V$			0.5	μA
Reverse breakdown voltage ¹⁾	V_{BR}	$I_T = 1mA$	25.5			V
Clamping voltage ²⁾	V_{CL}	$I_{PP} = 80A$ $t_p = 8/20\mu s$		32	34	V
Junction Capacitance	C_J	$V_R = 0V$ $f = 1MHz$		250	600	pF
Forward Voltage	V_F	$I_F = 10mA$		0.7		V

Notes:

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

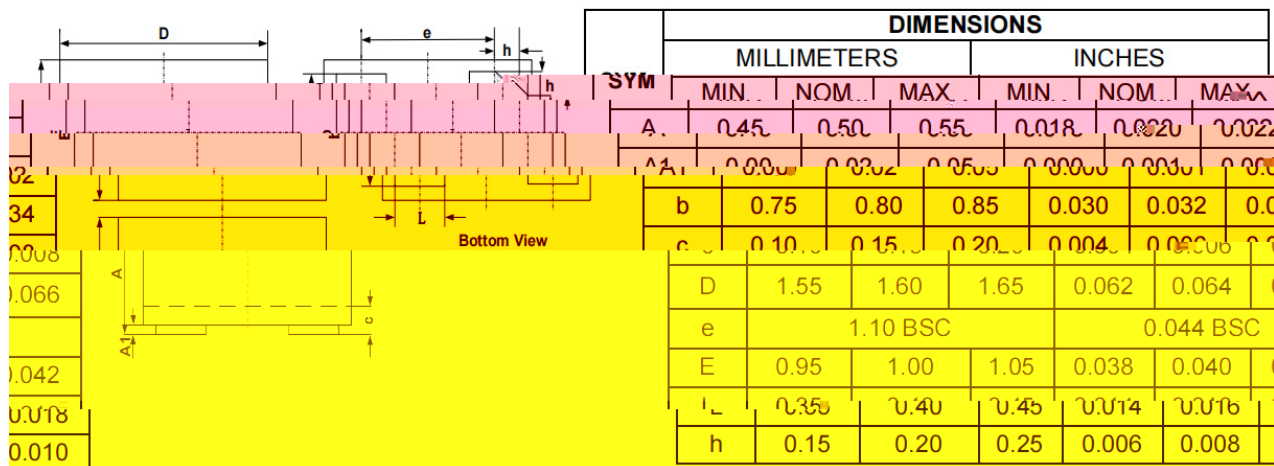
2) Non-repetitive current pulse, according to IEC61000-4-5.

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

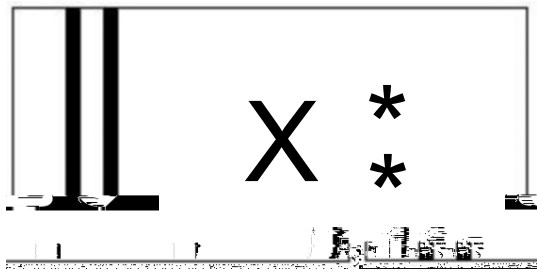


/ Package Dimensions

DFN1610



/ Marking Instructions



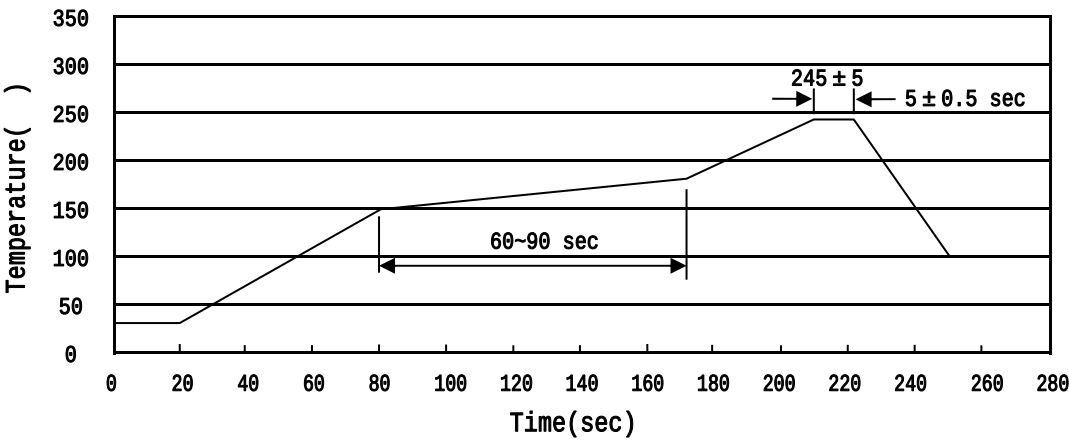
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Note

- XProduct Type Code
- **Lot No. Code, code change with Lot No

() / 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
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/ Notices