DFN1610-2L ESD

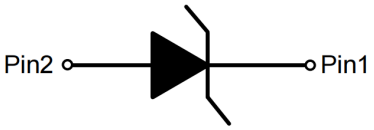
DFN1610-2L Plastic Package 1-Line,Uni-directional , ESD Protection Diode.

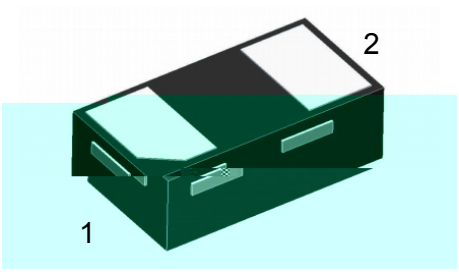
1ns 30KV IEC61000-4-2 4 ESD

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.

MP3

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

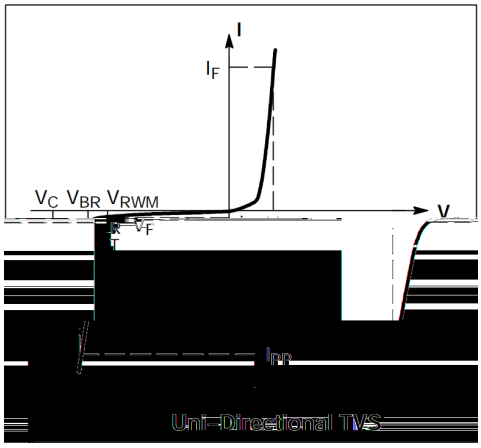




See Marking Instructions.

Parameter	Symbol	Rating	Unit
Peak Pulse Current(t_p = 8/20μs)	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	

Symbol	Parameter
V_{RWM}	Peak Reverse Working Voltage
I_R	Reverse Leakage Current @ V_{RWM}
V_{BR}	Breakdown Voltage @ I_T
[illegible]	[illegible]
[illegible] Pulse Current	I_{PP}	Maximum Reverse Peak
Clamping Voltage @ I_{PP}	V_C	C
Peak Pulse Power	P_{PP}	
Junction Capacitance	C_J	
Forward Current	I_F	
Forward Voltage @ I_F	V_F	

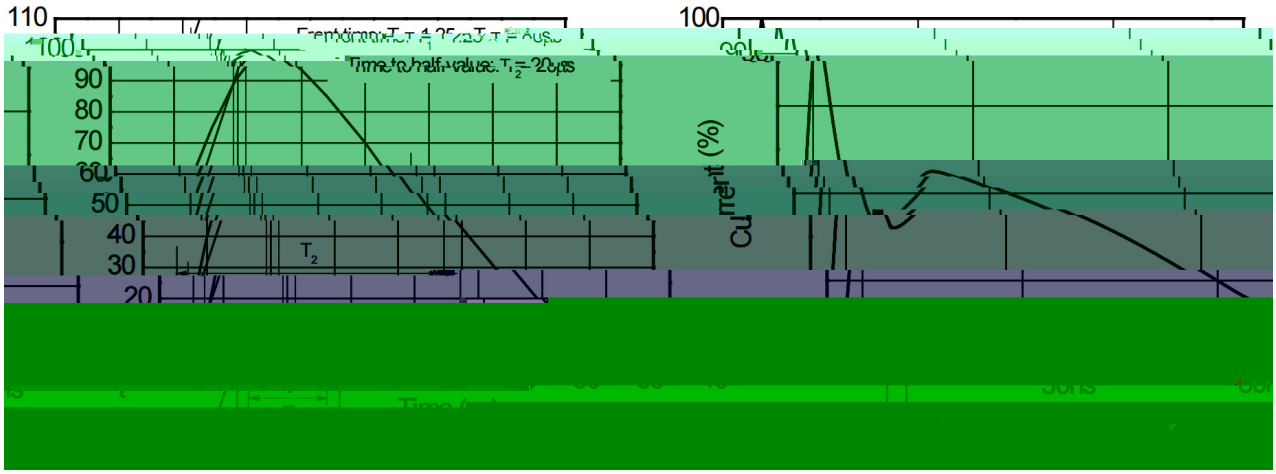


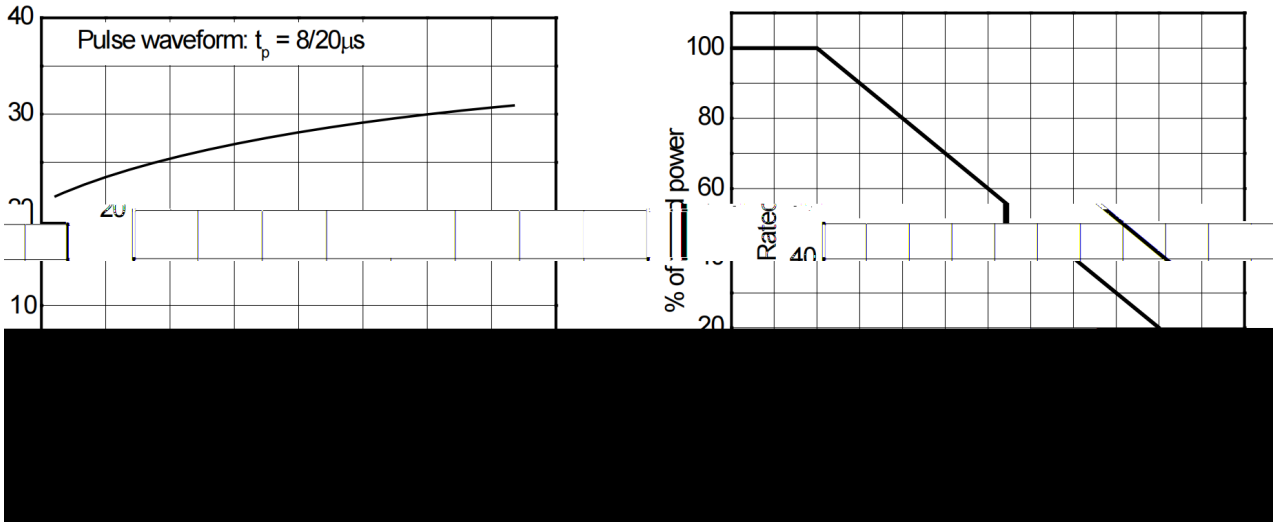
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Reverse maximum working voltage	V_{RWM}				24	V
Reverse leakage current	I_R	V_R = 24V			0.5	uA
Reverse breakdown voltage [1)]	V_{BR}	I_T=1mA	25.5			V
Clamping voltage [2)]	V_{CL}	I_{PP} = 80A t_p = 8/20μs		32	34	V
Junction Capacitance	C_J	V_R = 0V f =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

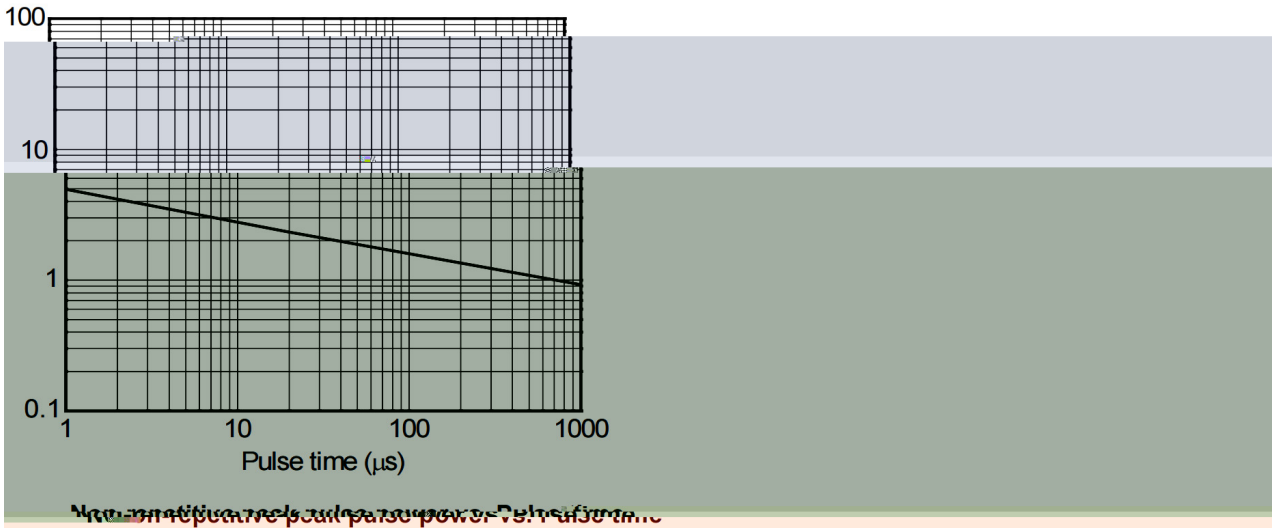
Notes:

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

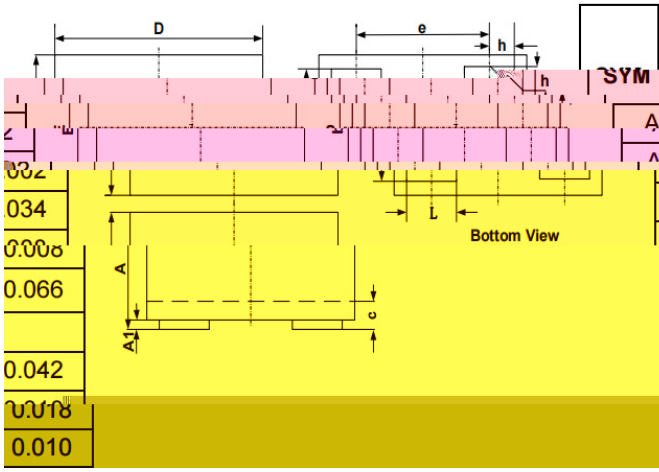
2) Non-repetitive current pulse, according to IEC61000-4-5.


110
100
90
80
70
60
50
40
30
20
T_2
Current (%)

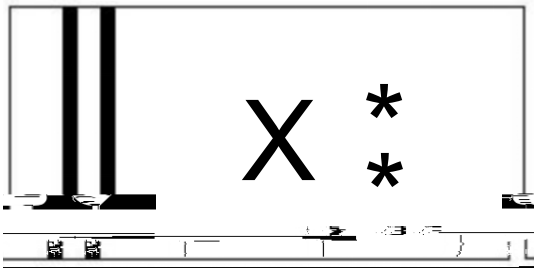

40
30
20
10
Pulse waveform: t_p = 8/20μs
100
80
60
40
20
% of Rated power


100
10
1
0.1
1
10
100
1000
Pulse time (μs)

DFN1610



SYM	DIMENSIONS					
	MILLIMETERS			INCHES		
	MIN	NOM	MAX	MIN	NOM	MAX
A	0.45	0.50	0.55	0.018	0.020	0.022
A1	0.00	0.03	0.05	0.000	0.001	0.002
b	0.75	0.80	0.85	0.030	0.032	0.034
c	0.10	0.15	0.20	0.004	0.006	0.008
D	1.55	1.60	1.65	0.062	0.064	0.066
e	1.10 BSC			0.044 BSC		
E	0.95	1.00	1.05	0.038	0.040	0.042
L	0.35	0.40	0.45	0.014	0.016	0.018
h	0.15	0.20	0.25	0.006	0.008	0.010



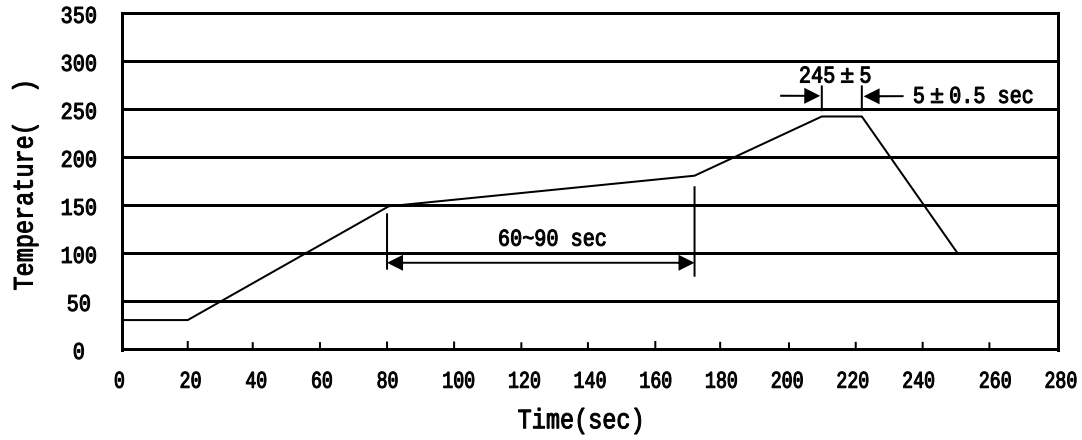
X

Note

X Product 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.

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