

/ Descriptions

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

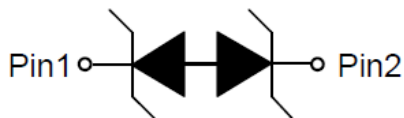
/ Features

- ◆ Stand-off voltage: $\pm 4.5\text{V}$ Max.
- ◆ Transient protection for each line according to
IEC61000-4-2(ESD): $\pm 30\text{kV}$ (contact)
IEC61000-4-4 (EFT): 40A (5/50ns)
IEC61000-4-5(surge): 37A (8/20 μs)
- ◆ Ultra-low capacitance: $C_J = 65\text{pF}$ typ.
- ◆ Low leakage current:
- ◆ Low clamping voltage: $V_{CL} = 7.0\text{V}$ typ. @ $I_{PP} = 16\text{A}$ (TLP)
- ◆ Solid-state silicon technology
- ◆ HF Product

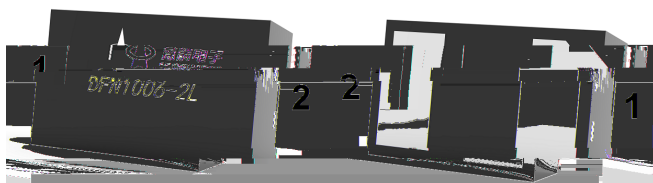
/ Applications

- ◆ Cellular handsets
- ◆ Tablets
- ◆ Laptops
- ◆ Other portable devices
- ◆ Network communication devices

/ Equivalent Circuit



/ Pinning



/ Marking

See Marking Instructions.

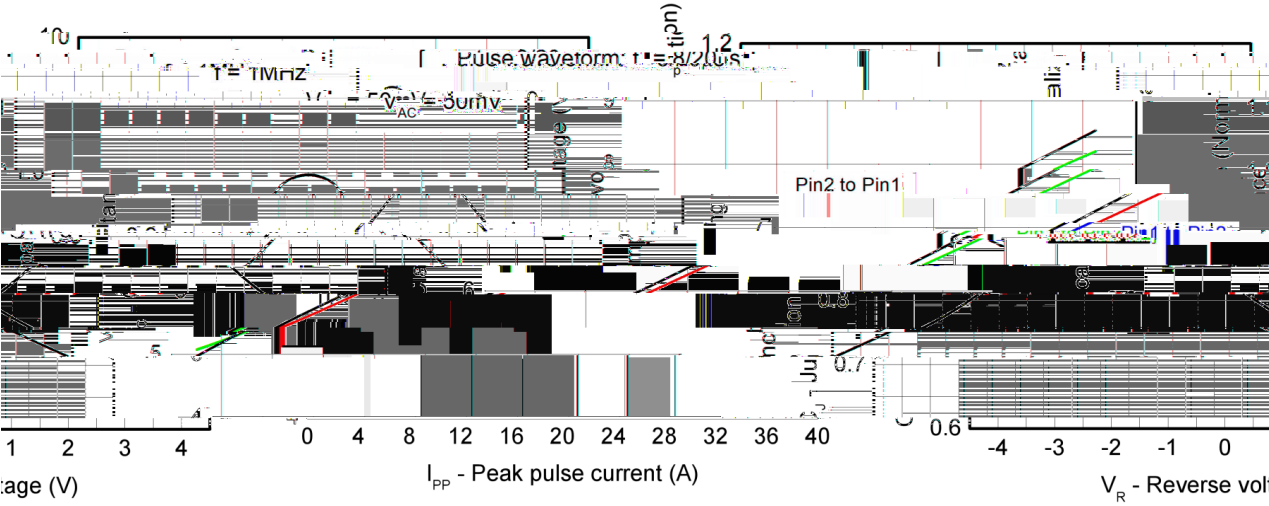
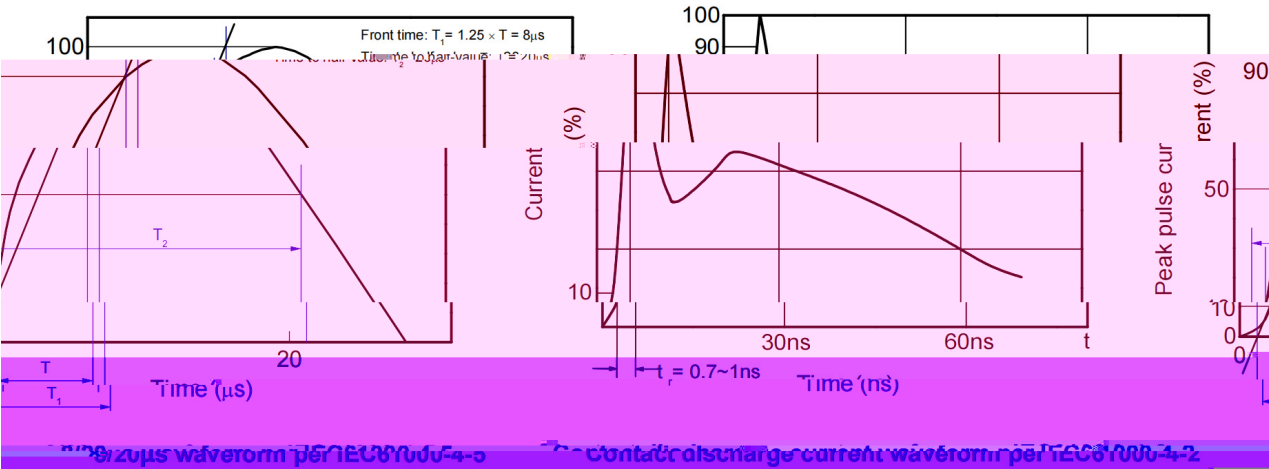
/ Absolute Maximum Ratings($T_a=25^\circ\text{C}$)

Parameter	Symbol	Rating	Unit
Peak Pulse Power($t_p = 8/20\mu\text{s}$)	P_{PK}	370	W
Peak Pulse Current($t_p = 8/20\mu\text{s}$)	I_{PP}	37	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	
Operating temperature	T_{OP}	-40~85	
Lead temperature	T_L	260	
Storage Temperature	T_{STG}	-55~+150	

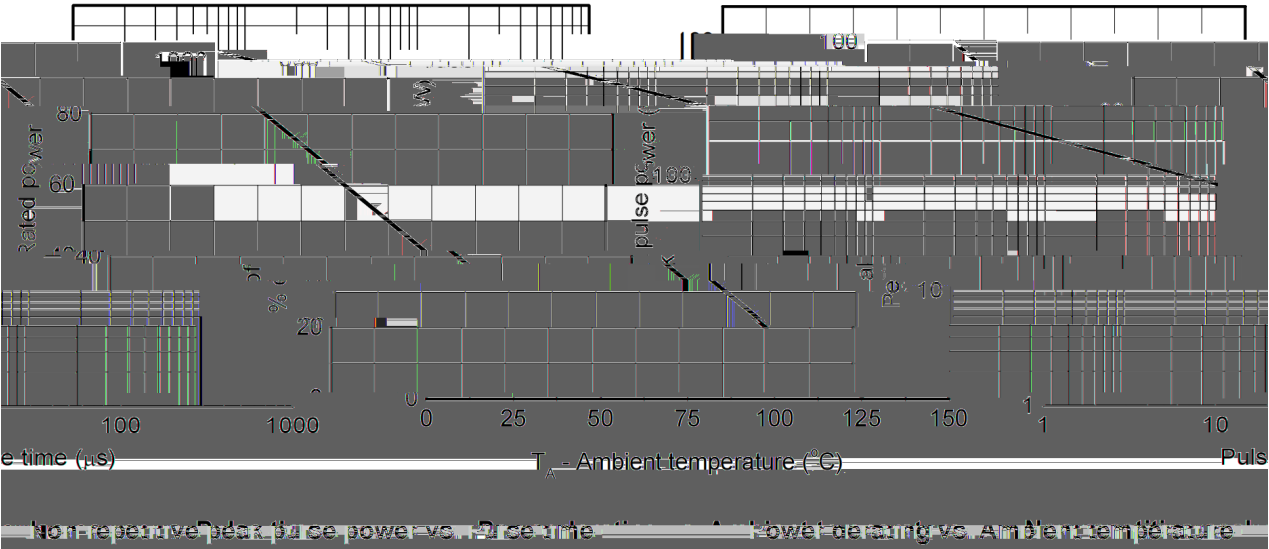
Definitions of electrical characteristics

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Reverse maximum working voltage	V_{RWM}				± 4.5	V
Reverse leakage current	I_R	$V_{RWM} = \pm 4.5V$			0.1	μA
Reverse breakdown voltage	V_{BR}	523.6795204		318.5055204	5204	r4183.1

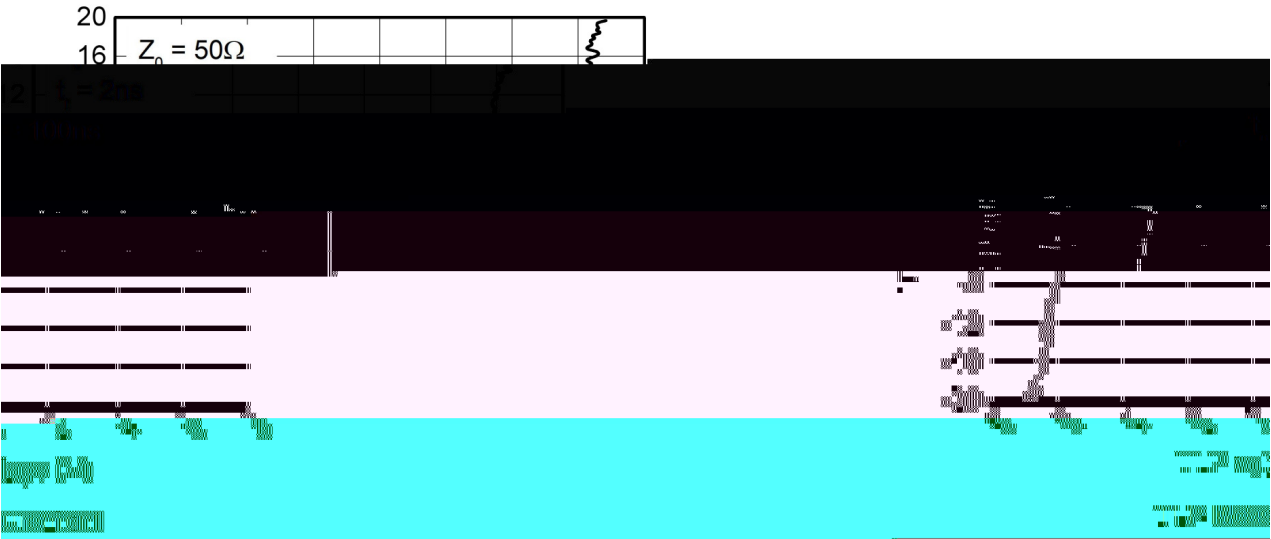
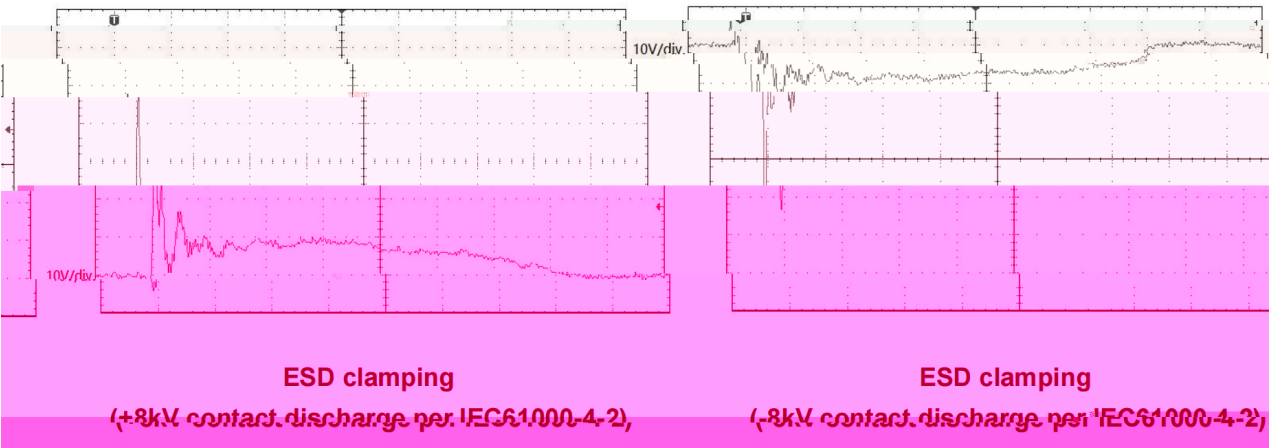
/ Electrical Characteristic Curve(Ta=25 unless otherwise noted)



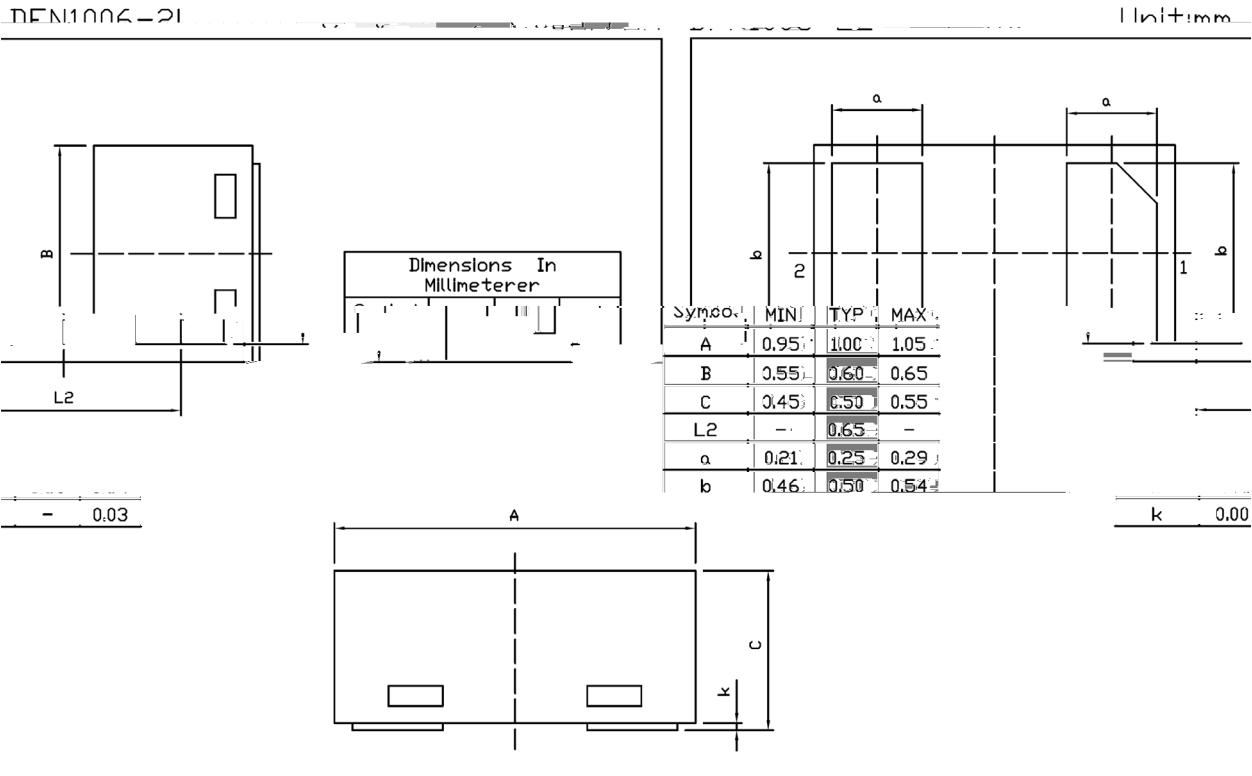
Clamping voltage vs. Peak pulse current Capacitance vs. Re



/ Electrical Characteristic Curve Ta=25 unless otherwise noted



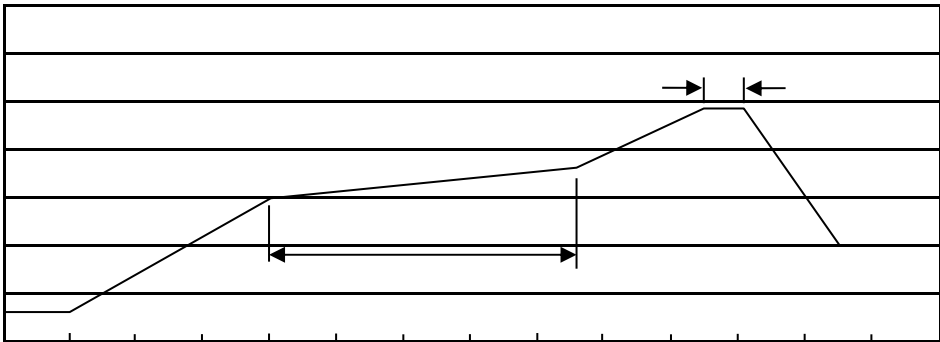
/ Package Dimensions



Rev.01 202108



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



- Note:
- 1

150 180

60 90sec;

2

245 5

5 0.5sec;
- 3

2 10 /sec.
- 1.Preheating:150~180 , Time:60~90sec.

2.Peak Temp.:245 5 , Duration:5 0.5sec.

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" ×8	180×120×180	390×385×205

/ Notices