

Descriptions

This is working voltage 18V ESD diode 2-pin lead-less package in a DFN1006-2L package

Features

- 2-pin lead-less package
- Junction capacitance (Max value: 0.8pF)
- Peak Pulse Current (8/20 μ s): 5A
- IEC61000-4-2 (ESD) \pm 15kV (air), \pm 10kV (contact)
- Low clamping voltage
- Low leakage current
- Working voltages:18V
- RoHS Compliant

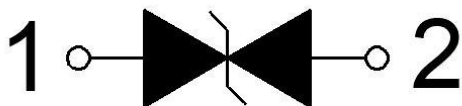
Applications

- Cellular Handsets and Accessories
- Notebooks and Handhelds, Audio Players,Peripherals
- Personal Digital Assistants, Portable,Instrumentation
- Keypads, Side Keys, LCD Displays

Mechanical Characteristics

- Package: DFN1006-2L
- Lead Finish:Matte Tin
- Case Material: “Green” Molding Compound
- UL Flammability Classification Rating 94V-0
- Moisture Sensitivity: Level 3 per J-STD-020
- Tape Reel :10000pcs

Equivalent Circuit & Pinning



Bi-directional



Absolute Maximum Ratings(Ta=25°C)

Parameters	Symbol	Value	Unit
Peak Pulse Power (tp=8/20μs waveform)	P _{PP}	40	W
Peak Pulse Current (8/20μs)	I _{PP}	5	A
ESD per IEC 61000-4-2 (Air)	VESD	±15	KV
ESD per IEC 61000-4-2 (Contact)		±10	
Operating Temperature Range	T _J	-55 to +125	°C
Storage Temperature Range	T _{stg}	-55 to +150	°C

Electrical Characteristics (Ta=25°C)

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Reverse Working Voltage	V _{RWM}				18	V
Trigger Voltage	V _{t1}	I _T = 10mA	20	21.8	26	V
Holding Voltage	V _h	I _T = 100mA	2.8	3.3		V
Leakage Current	I _{Leak}	V _R =2.5V			0.1	uA
Leakage Current	I _{Leak}	V _R = 18V			0.2	uA
Clamping Voltage	V _C	I _{PP} = 1A, T _P =8/20us		3.5	5	V
Clamping Voltage	V _C	I _{PP} = 5A, T _P =8/20us		4	7	V
Dynamic Resistance	R _{DYN}	TLP=0.2/100ns		0.26		Ω
Junction Capacitance	C _J	V _R =0V, f = 1MHz		0.4	0.8	pF

Typical Characteristics

FIG1: Power rating derating curve

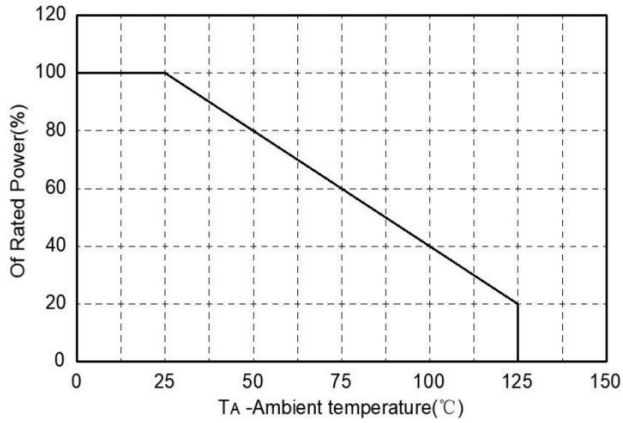


FIG2: pulse Waveform

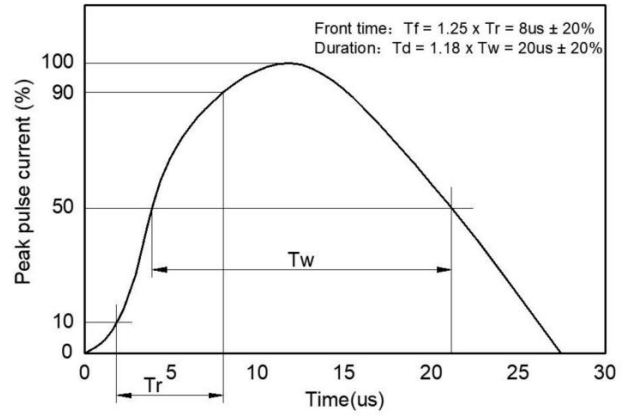


FIG3: Capacitance between terminals characteristics

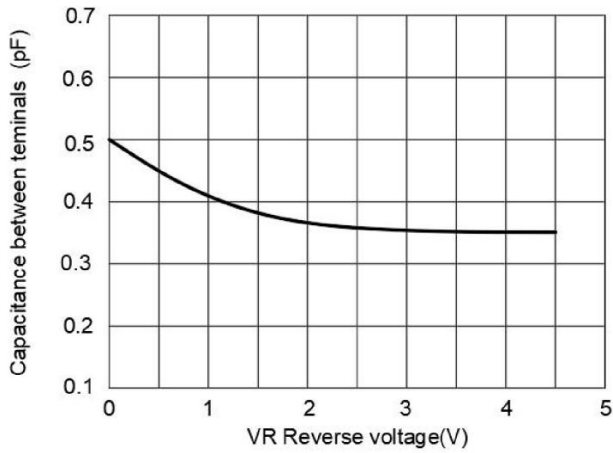
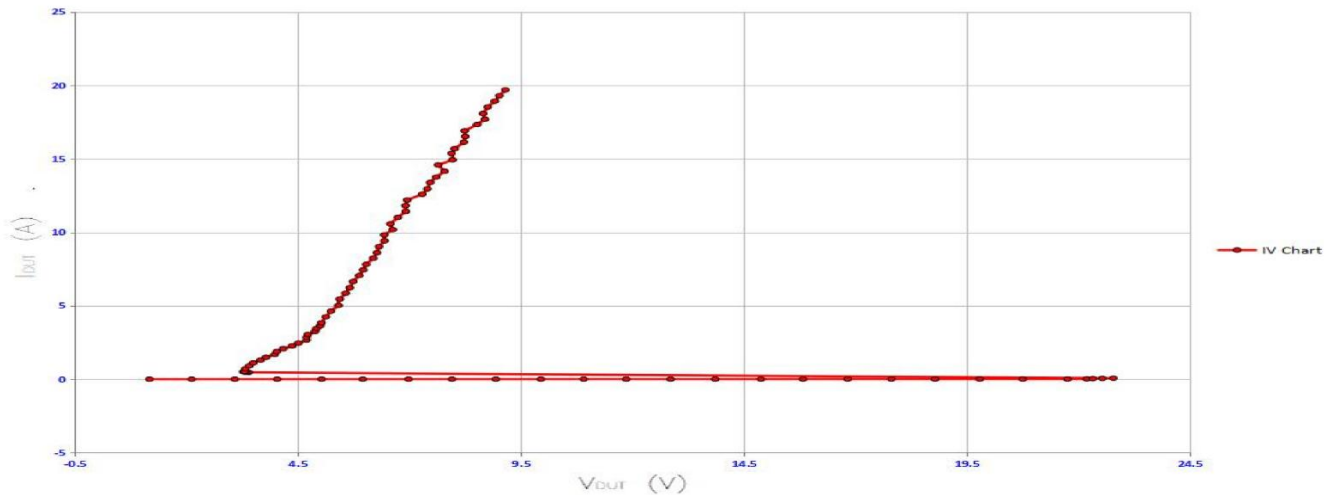
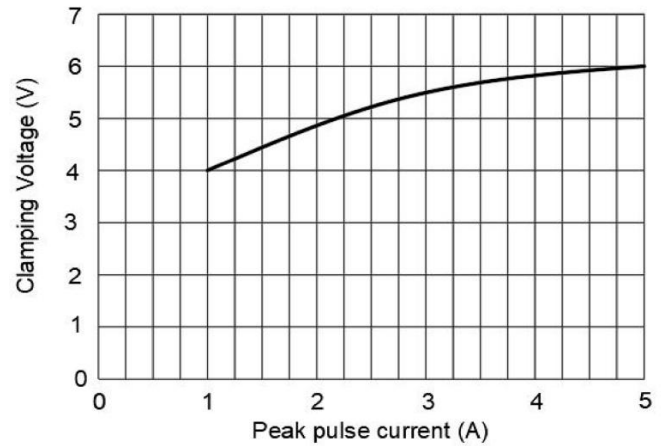


FIG4: Clamping Voltage vs. Peak Pulse Current

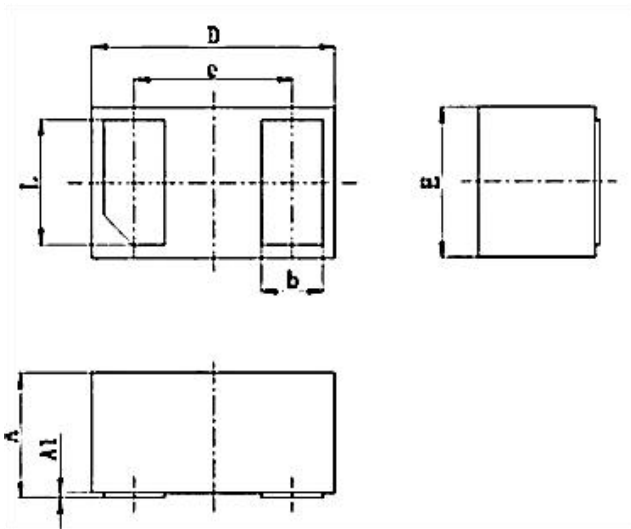


Marking Information



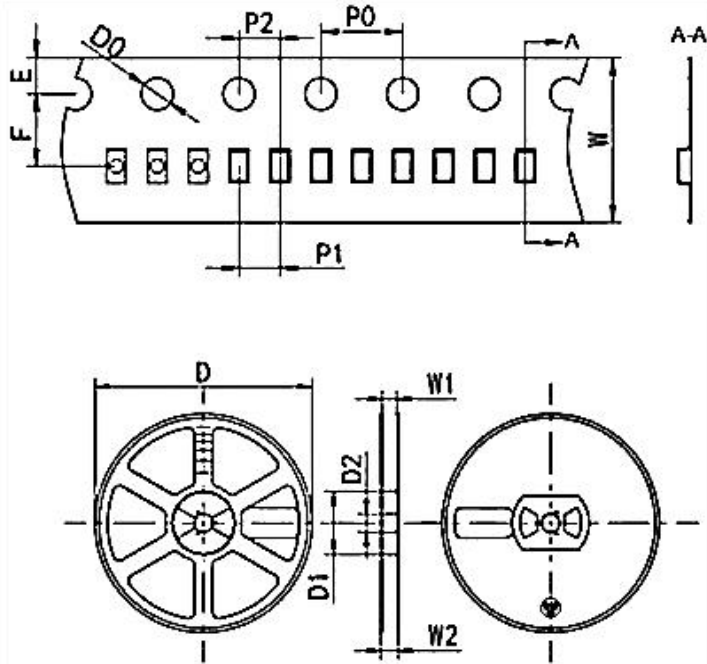
18B=Marking Code

Package mechanical data



Symbol	Dimension in Millimeters	
	min	max
A	0.4	0.5
A1	0	0.05
D	0.9	1.1
E	0.55	0.65
e	(0.65)	
b	0.2	0.3
L	0.34	0.55

Tape & reel specification - DFN1006



Symbol	Dimension in Millimeters
Tape	
D0	1.50+0.10/-0.00
E	1.75±0.10
F	3.50±0.10
P0	4.00±0.10
P1	2.00±0.10
P2	2.00±0.10
W	8.00+0.3/-0.1
Reel	
D	178.0±2.00
D1	54.40±1.00
D2	13.00±1.00
W1	9.50±1.00
W2	12.30±1.00