

Description

This is working voltage 3.3V ESD diode 2-pin lead-less package in a DFN1006-2L package.

Applications

- Cellular Handsets and Accessories
- Notebooks and Handhelds, Peripherals
- Personal Digital Assistants
- Portable Instrumentation
- Digital Cameras
- Audio Players

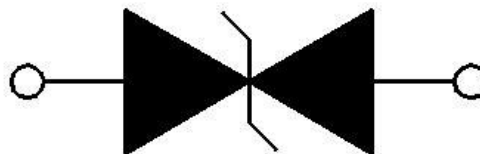
Features

- 2-pin lead-less package
- Low junction capacitance (Max value: 6.5pF)
- Peak Pulse Current (8/20 μ s) Max: 3.5A
- IEC61000-4-2 (ESD) \pm 15kV (air), \pm 8kV (contact)
- Low clamping voltage
- Low leakage current
- Working voltages:3.3V
- RoHS Compliant

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

Appearance & Symbol



Bi-directional

Absolute Maximum Ratings (T=25°C, RH=45%-75%, unless otherwise noted)

Parameters	Symbol	Value	Unit
Peak Pulse Power (tp=8/20μs waveform)	P _{PP}	40	W
Peak Pulse Current (8/20μs)	I _{PP}	3.5	A
ESD per IEC 61000-4-2 (Air)	V _{ESD}	±15	KV
ESD per IEC 61000-4-2 (Contact)		±8	
Operating Temperature Range	T _J	-55 to +125	°C
Storage Temperature Range	T _{stg}	-55 to +150	°C

Electrical Characteristics (T=25°C, RH=45%-75%, unless otherwise noted)

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Reverse Working Voltage	V _{RWM}				3.3	V
Reverse Breakdown Voltage	V _{BR}	I _R = 1mA	4.3		8.5	V
Reverse Leakage Current	I _R	V _R = 3.3V			0.1	uA
Clamping voltage	V _C	I _{PP} = 3.5A, T _P =8/20us			12.5	V
Junction capacitance	C _J	V _R =0V, f = 1MHz		5.7	6.5	pF

Typical Characteristics

FIG1: Power rating derating curve

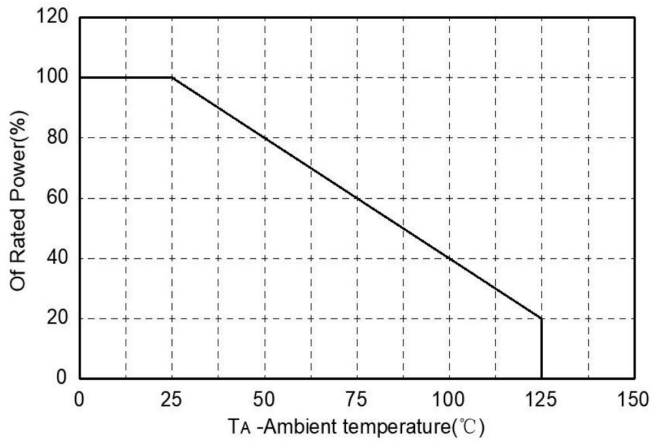


FIG2: pulse Waveform

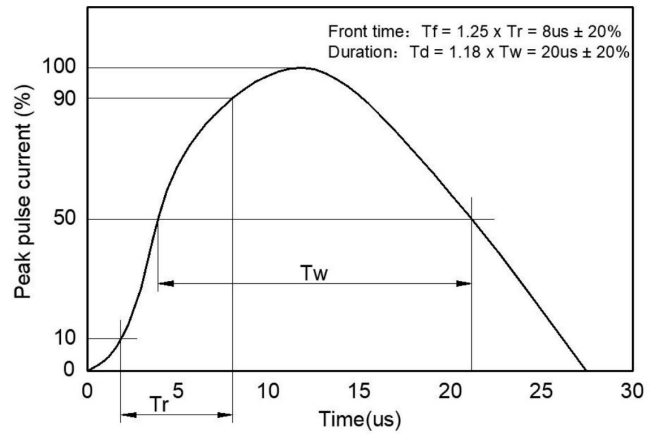


FIG3: Capacitance between terminals characteristics

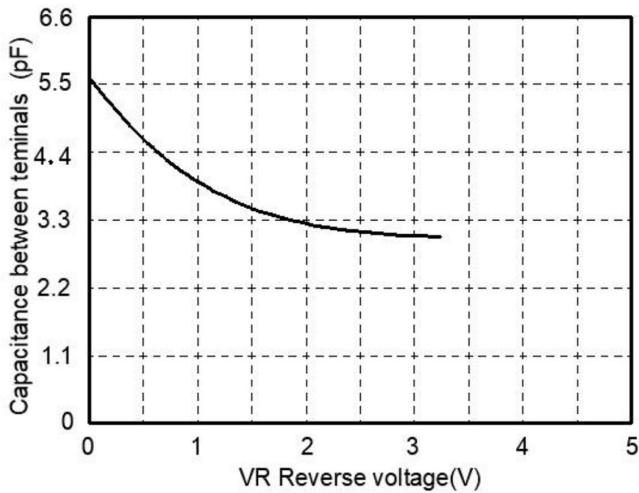
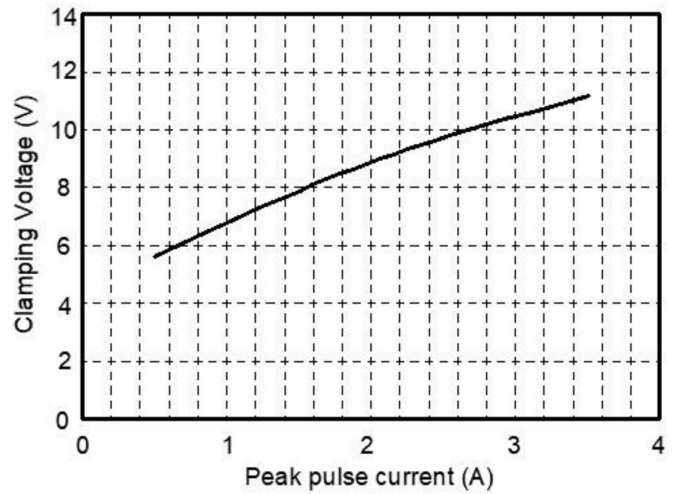
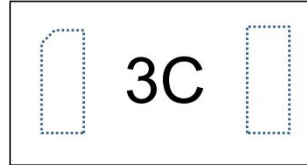


FIG4: Clamping Voltage vs. Peak Pulse Current

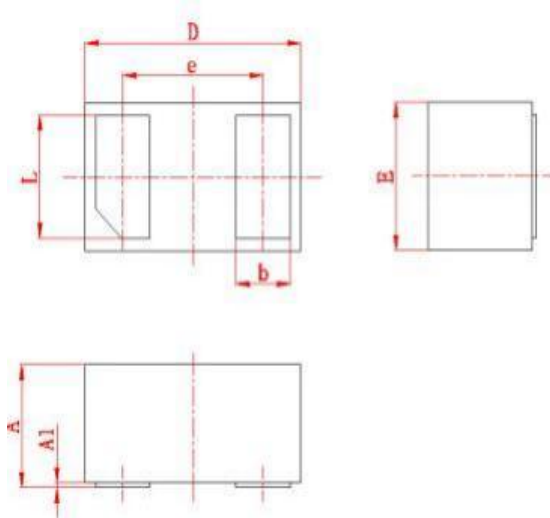


Marking Information



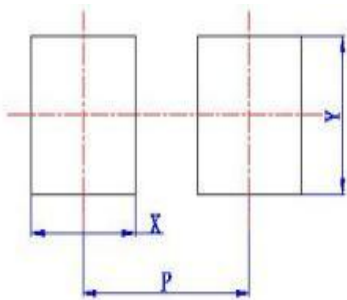
3C=Marking Code

Package mechanical data



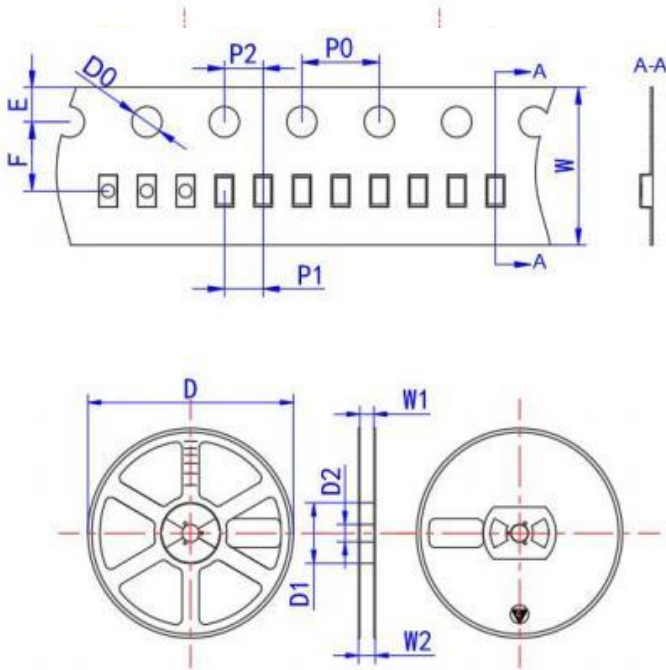
Symbol	Dimension in Millimeters	
	min	max
A	0.4	0.5
A1	0	0.05
D	0.9	1.1
E	0.55	0.65
e	(0.65)	
b	0.2	0.3
L	0.34	0.55

Suggested Land Pattern



Symbol	Dimension in Millimeters
	typ
X	(0.5)
Y	(0.7)
P	(0.8)

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