



DESCRIPTION

The ESD0501L is available in DFN1006-2L Package.

MECHANICAL DATA

- Package: DFN1006-2L
- Lead Finish: Matte Tin
- Case Material: "Green" Molding Compound.
- UL Flammability Classification Rating 94V-0
- Moisture Sensitivity: Level 1 per J-STD 020

APPLICATION

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

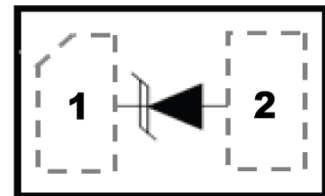
ORDERING INFORMATION

Package Type	Part Number
DFN1006-2L	ESD0501L
Note	SPQ: 10,000pcs/Reel
AiT provides all RoHS Compliant Products	

FEATURE

- 2-pin lead-less package
- Junction capacitance (Max value: 0.8pF)
- Peak Pulse Current (8/20 μ s): 5A
- IEC61000-4-2 (ESD)
 ± 25 kV (air), ± 20 kV (contact)
- Low clamping voltage
- Low leakage current
- Working voltages:5V

PIN DESCRIPTION



PIN#	DESCRIPTION
1	Cathode
2	Anode



ABSOLUTE MAXIMUM RATINGS

T_A = 25°C, unless otherwise noted.

P _{PP} , Peak Pulse Power (8/20μs)		55W
V _{ESD} , ESD per IEC61000-4-2	Contact	±25kV
	Air	±20kV
T _{STG} , Storage Temperature Range		-55°C ~ +150°C
I _{PP} , Peak Pulse Power Current		5A
T _J , Lead Soldering Temperature		-55°C ~ +125°C

Stresses above may cause permanent damage to the device. These are stress ratings only and functional operation of the device at these or any other conditions beyond those indicated in the Electrical Characteristics are not implied. Exposure to absolute maximum rating conditions for extended periods may affect device reliability.

ELECTRICAL CHARACTERISTICS

T_A = 25°C, unless otherwise noted.

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Reverse Stand-Off Voltage	V _{RWM}		-	-	5.0	V
Reverse Breakdown Voltage	V _{BR}	I _T =1mA	5.6	-	9.0	V
Reverse Leakage Current	I _R	V _{RWM} =5V	-	-	0.2	nA
Clamping Voltage	V _C	I _{PP} =1A, t _p =8/20μs	-	-	10.0	V
		I _{PP} =5A, t _p =8/20μs	-	14.0	16.0	
Junction Capacitance	C _J	V _R =0V, f=1MHz	-	-	0.8	pF



TYPICAL PERFORMANCE CHARACTERISTICS

Fig 1. Rated Power vs. Temperature and

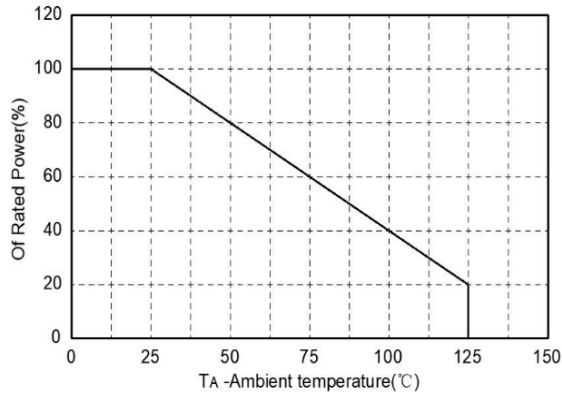


Fig 2. Pulse Current vs. Time

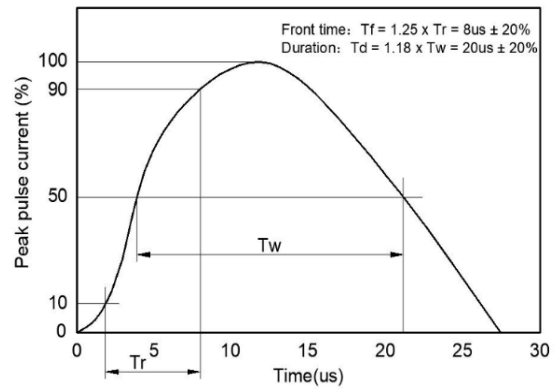


Fig 3. Capacitance between Terminals Characteristics

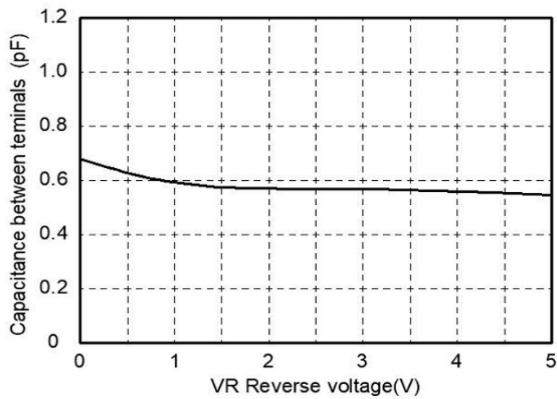
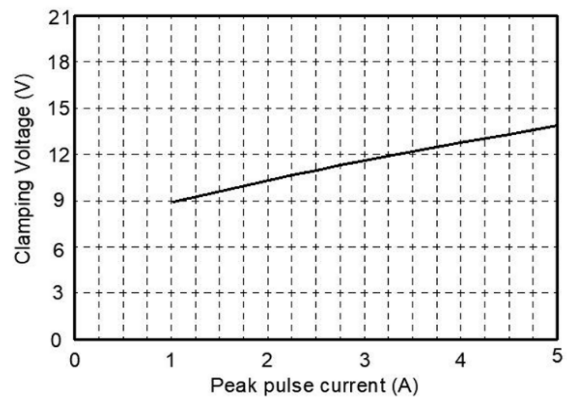


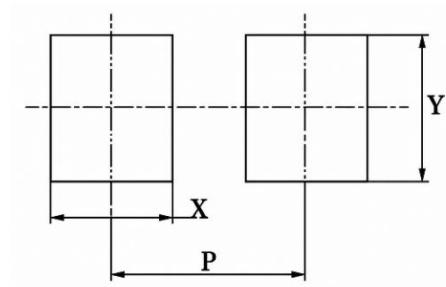
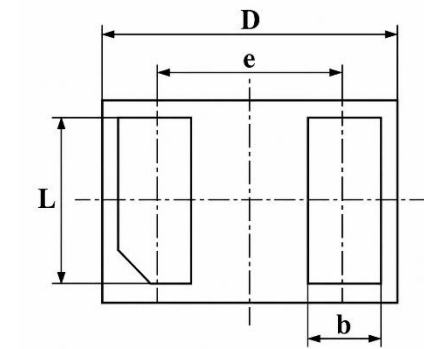
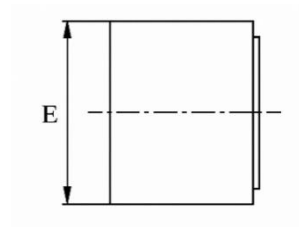
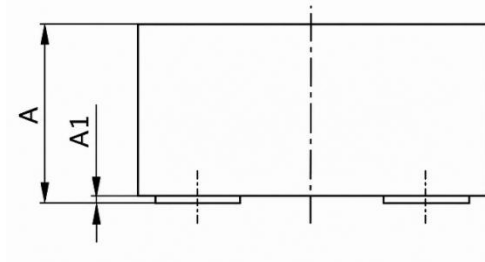
Fig 4. Clamping Voltage vs. Peak Pulse Current





PACKAGE INFORMATION

Dimension in DFN1006-2L Package (Unit: mm)



Symbol	Min.	Max.
A	0.4	0.5
A1	0	0.05
D	0.9	1.1
E	0.55	0.65
e	0.65 Typ.	
b	0.2	0.3
L	0.34	0.55
X	0.5 Typ.	
Y	0.7 Typ.	
P	0.8 Typ.	



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