

Description

- DFN1006-2L plastic package
- ESD protection diode

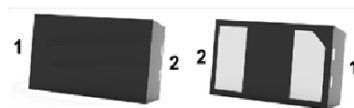
Features

- Ultra small package
- Response Time is Typically < 1 ns
- ESD rating of class 3 (> 16 kV) per human body model
- IEC61000-4-2 Level 4 ESD protection
- Qualified to AEC-Q101 standards for High reliability
- Halogen-free product

Applications

- Suitable for cellular phones audio
- MP3 players
- Digital cameras
- Portable devices
- Mobile telephone and other users
- Meet the stringent requirements of automotive applications

Equivalent Circuit & Pinning



Absolute Maximum Ratings(Ta=25 °C)

Parameter	Symbol	Rating	Unit
Peak pulse power ($t_p = 8/20\mu s$)	P_K	69	W
Peak pulse current ($t_p = 8/20\mu s$)	I_{PP}	5.5	A
ESD according to IEC61000-4-2 air discharge	V_{ESD}	± 15	KV
ESD according to IEC61000-4-2 contact discharge		± 8	
Junction temperature	T_J	150	°C
Storage temperature	T_{STG}	-55~+150	°C

Electrical Characteristics(Ta=25 °C)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Reverse maximum working voltage	V_{RWM}				5.0	V
Reverse leakage current	I_R	$V_{RWM} = 5V$			0.5	μA
		$V_{RWM} = 3.5V$			0.3	μA
Reverse breakdown voltage ¹⁾	V_{BR}	$I_T = 1mA$	5.6			V
Clamping voltage ²⁾	V_C	$I_{PP} = 1A$ $t_p = 8/20\mu s$			9.8	V
		$I_{PP} = 5.5A$ $t_p = 8/20\mu s$			12.5	V
Junction capacitance	C_J	$V_R = 0V$ $f = 1MHz$			15	pF

Notes:

- 1) V_{BR} is measured with a pulse test current I_T at an ambient temperature of 25°C.
- 2) Non-repetitive current pulse, according to IEC61000-4-5.

Electrical Characteristic Curve

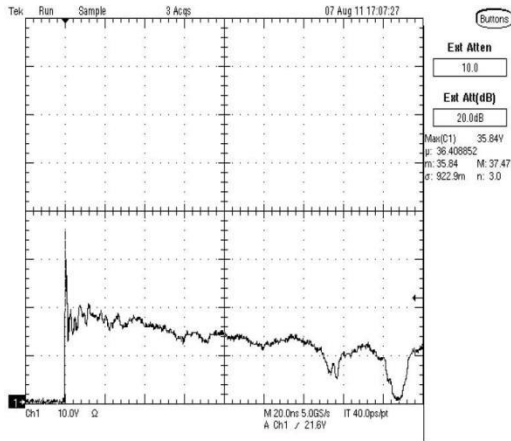


Fig1. ESD Clamping Voltage Screenshot

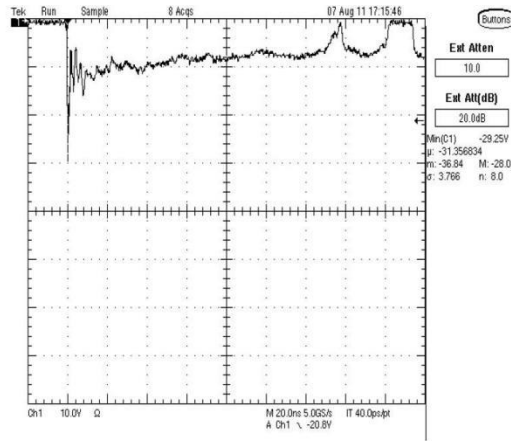


Fig2. ESD Clamping Voltage Screenshot

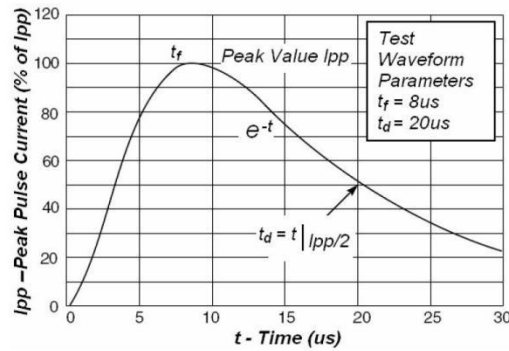
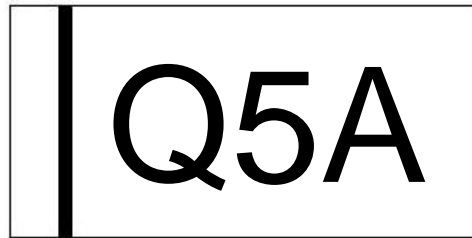


Fig3. Pulse Waveform

Marking Instructions



Note :

Q: Automobile halogen-free product Code

5A: Product Type

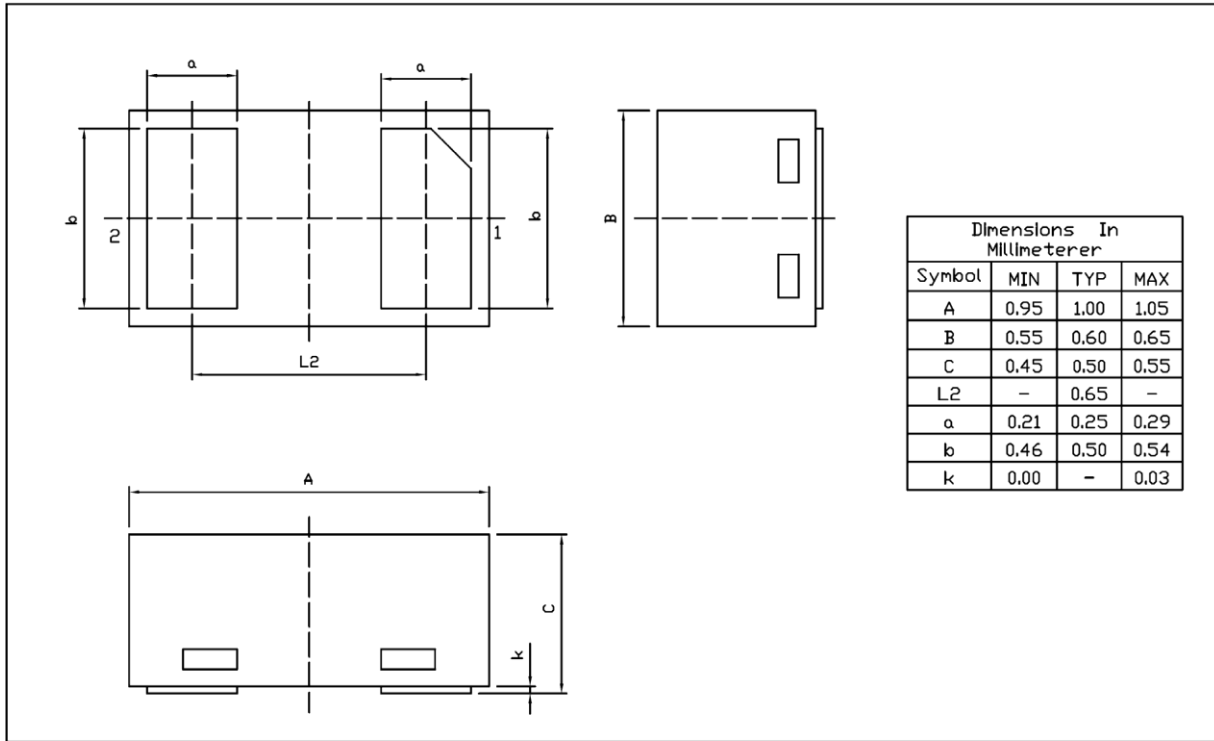
Packaging SPEC.

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" x8	180x120x180	390x385x205

Package Outline Dimensions

DFN1006-2L

Unit:mm



Dimensions In Millimeter			
Symbol	MIN	TYP	MAX
A	0.95	1.00	1.05
B	0.55	0.60	0.65
C	0.45	0.50	0.55
L2	-	0.65	-
a	0.21	0.25	0.29
b	0.46	0.50	0.54
k	0.00	-	0.03

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