

DFN1006-2L Plastic-Encapsulate ESD Protection Diodes

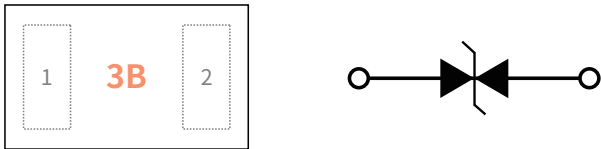
Features

- Low leakage current
- DFN1006-2L surface mount package
- IEC 61000-4-2 (ESD Air): ±30kV
- IEC 61000-4-2 (ESD Contact): ±30kV
- IEC 61000-4-5 (Lightning 8/20μs): 8.5A

Applications

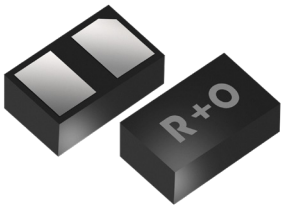
- Cellular Handsets and Accessories
- Personal Digital Assistants
- Notebooks and Handhelds
- Portable Instrumentation, Digital Cameras
- Peripherals, Audio Players, Industrial Equipment

Function Diagram



Reverse Working Voltage
3.3V Max.
Low capacitance
10pF(Typ)

DFN1006-2L

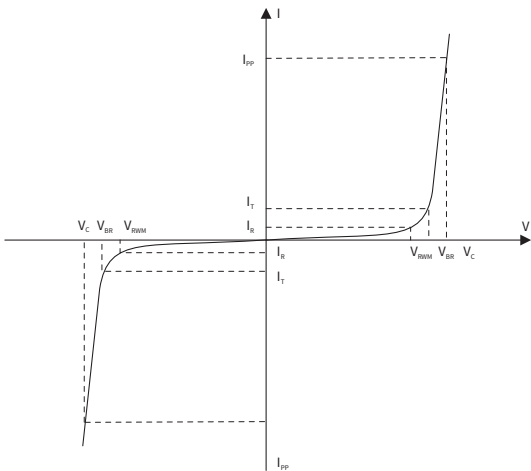


Maximum Ratings (Ta=25°C Unless otherwise specified)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V _{ESD}	Electrostatic Discharge Voltage	ESD per IEC 61000-4-2(Air)	±30	KV
		ESD per IEC 61000-4-2(Contact)	±30	KV
P _{PP}	Peak Pulse Power	tp = 8/20 μs	72	W
I _{PP}	Rated Peak Pulse Current	tp = 8/20 μs	8.5	A
T _J	Operating JunctionTemperature Range	—	-55 to +150	°C
T _{STG}	Operating JunctionTemperature Range	—	-55 to +150	°C

Electrical Parameter

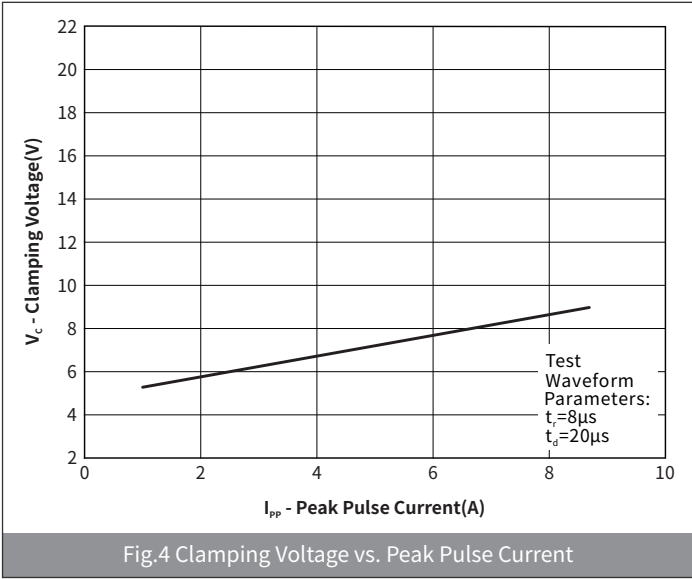
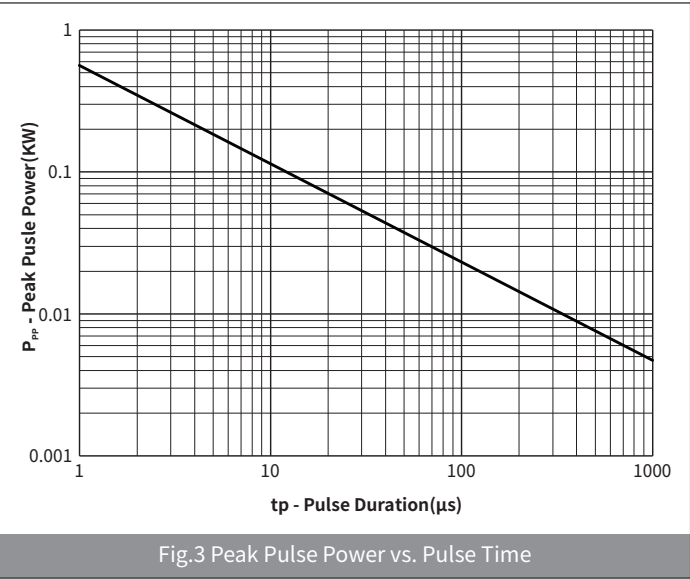
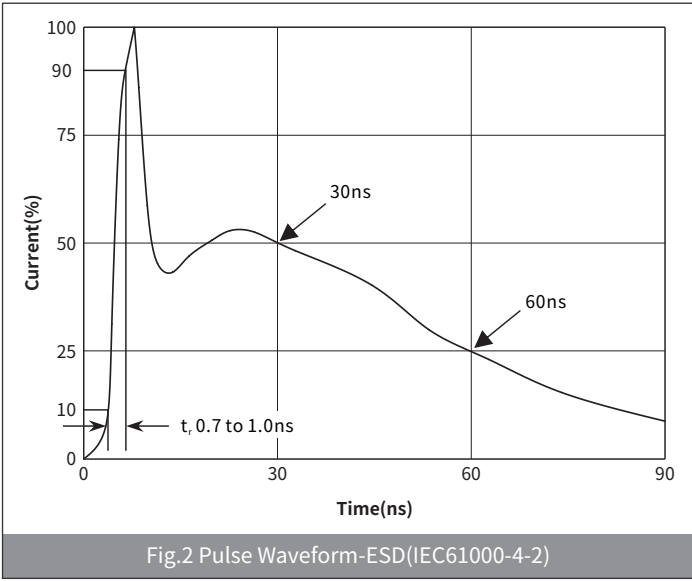
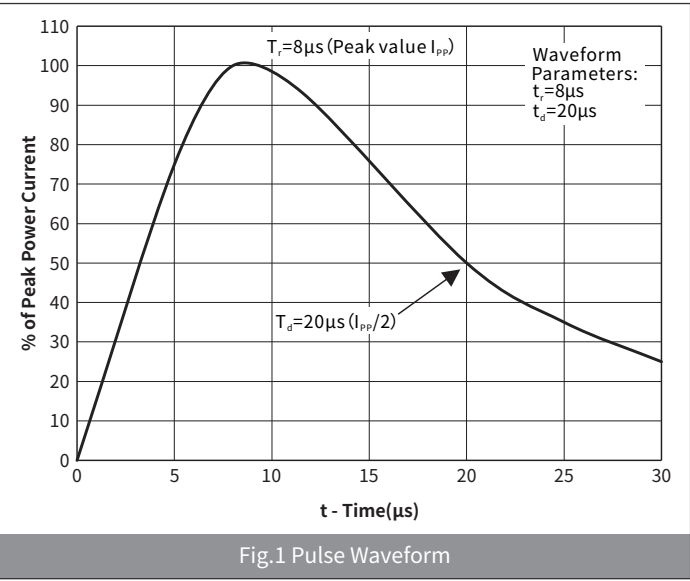
SYMBOL	PARAMETER
I _{PP}	Peak Pulse Current @8/20μs
V _C	Clamping Voltage @ I _{PP}
I _{BR} / I _T	Test Current
V _{BR}	Breakdown Voltage @ I _T
V _{RWM}	Peak Reverse Working Voltage
I _R	Reverse Leakage Current @ V _{RWM}
I _{TRIG}	Reverse Trigger Current
V _{TRIG}	Reverse Trigger Voltage
I _{HOLD}	Reverse Holding Current
V _{HOLD}	Reverse Holding Voltage
P _{PP}	Peak Pulse Power Dissipation



● Electrical Characteristics (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	CONDITION	Min	Typ	Max	UNIT
Peak Reverse Working Voltage	V_{RWM}	$T_a=25^{\circ}\text{C}$	—	—	3.3	V
Breakdown Voltage	V_{BR}	$I_R=1\text{mA}, T_a=25^{\circ}\text{C}$	3.5	—	5.0	V
Reverse Leakage Current	I_R	$V_R=3.3\text{V}, T_a=25^{\circ}\text{C}$	—	—	0.1	μA
Clamping Voltage	V_C	$I_{PP}=1.0\text{A}, t_p=8/20\mu\text{s}$	—	—	5.0	V
		$I_{PP}=8.5\text{A}, t_p=8/20\mu\text{s}$	—	—	8.5	
Junction Capacitance	C_J	$V_R=0\text{V}, f=1\text{MHz}$	—	10	—	pF

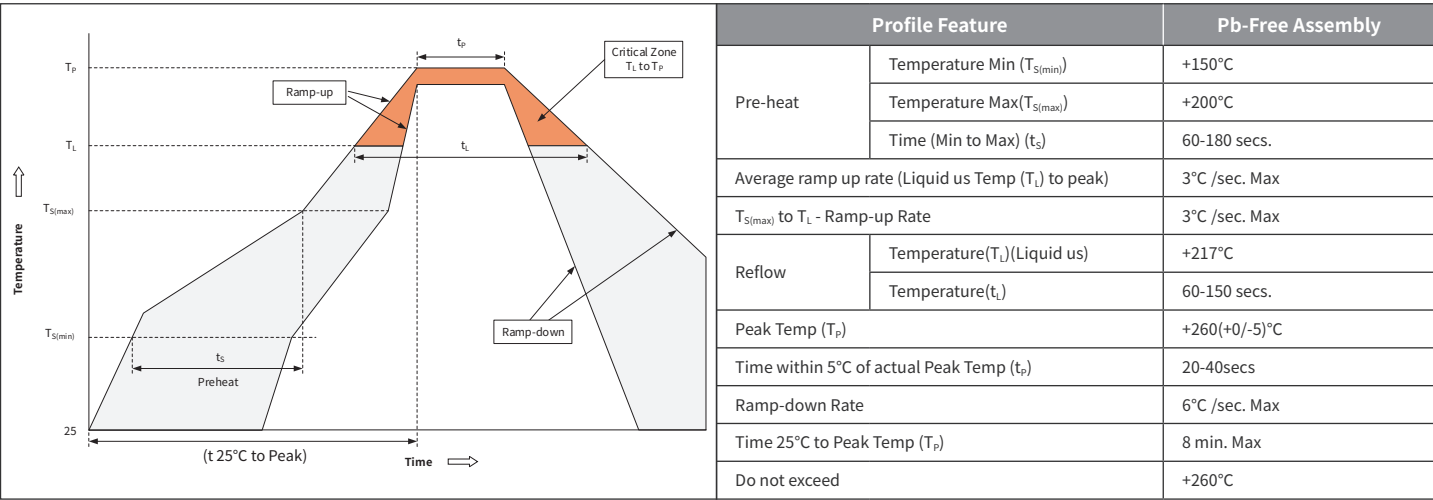
● Ratings And Characteristics Curves (Ta=25°C Unless otherwise specified)



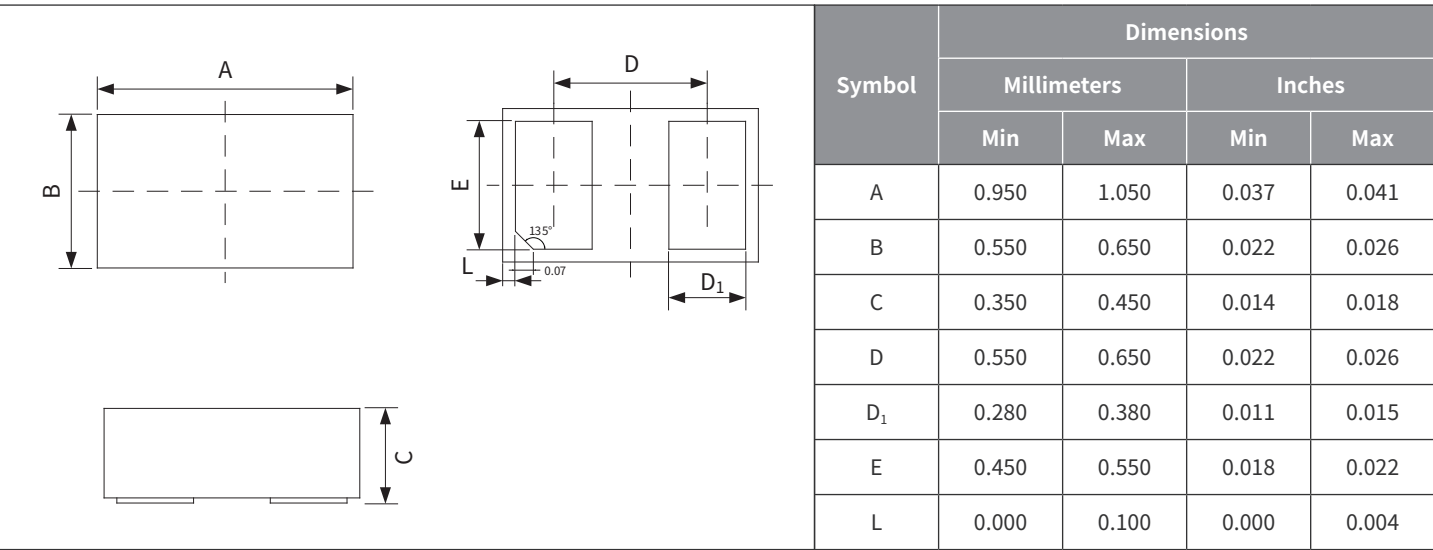
● Ordering Information

PREFERED P/N	PACKAGE	SIZE(mm)	DELIVERY MODE	MPQ(PCS)
ESD5431N	DFN1006-2L	1.00×0.60×0.37	7" REEL	10,000

● Recommended Soldering Conditions



● Package Outline Dimensions (DFN1006-2L)



● Suggested Pad Layout

