

DFN1006-2L Plastic-Encapsulate ESD Protection Diodes

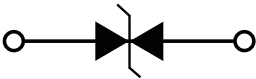
Features

- Low leakage current
- Low clamping voltage
- IEC 61000-4-2 (ESD Air): ±25kV
- IEC 61000-4-2 (ESD Contact): ±22kV
- IEC 61000-4-5 (Lightning 8/20μs): 2A

Applications

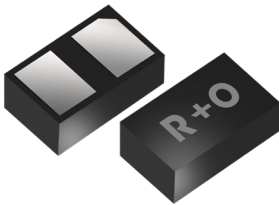
- Cellular Handsets and Accessories
- Audio Players, Peripherals
- Notebook computers
- Personal Digital Assistants
- Portable Instrumentation
- Keypads, Side Keys, LCD Displays

Function Diagram



Reverse Working Voltage
5.0 V Max.
Small capacitance
2.5pF(Typ.)

DFN1006-2L

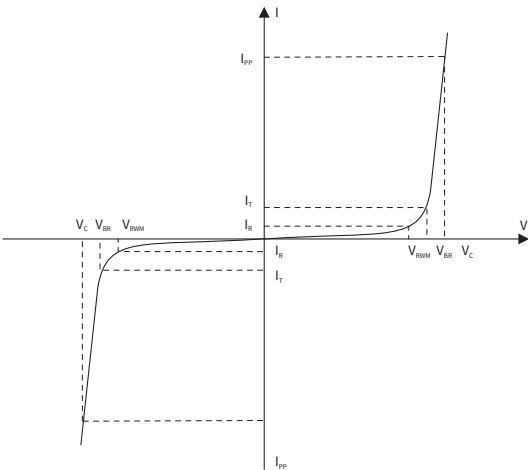


Maximum Ratings (Ta=25°C Unless otherwise specified)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V _{ESD}	Electrostatic Discharge Voltage	ESD per IEC 61000-4-2(Air)	±25	KV
		ESD per IEC 61000-4-2(Contact)	±22	KV
P _{PP}	Peak Pulse Power	tp = 8/20 μs	25	W
I _{PP}	Rated Peak Pulse Current	tp = 8/20 μs	2.0	A
T _J	Operating JunctionTemperature Range	—	-55 to +125	°C
T _{STG}	Operating JunctionTemperature Range	—	-55 to +125	°C

Electrical Parameter

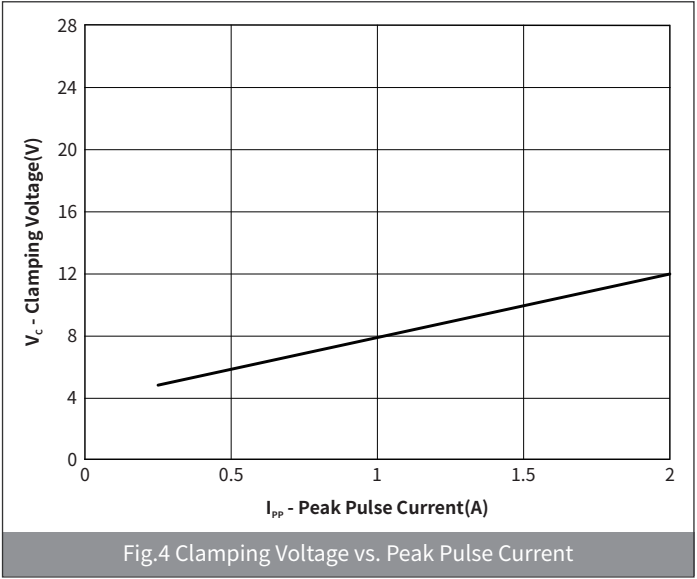
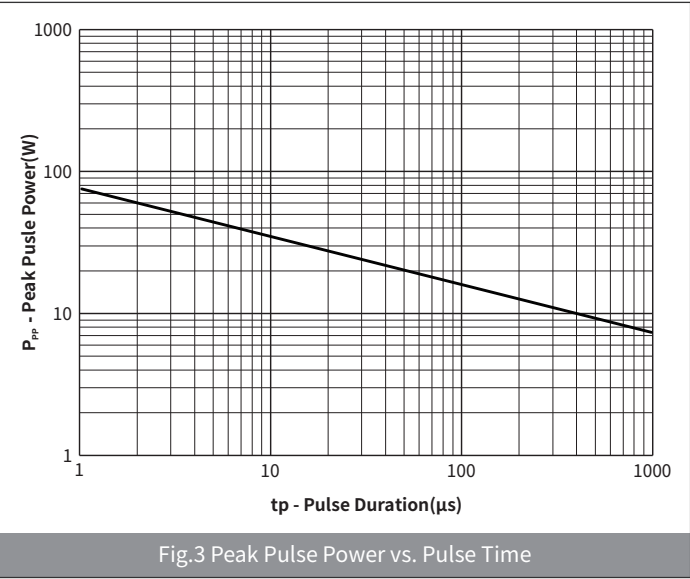
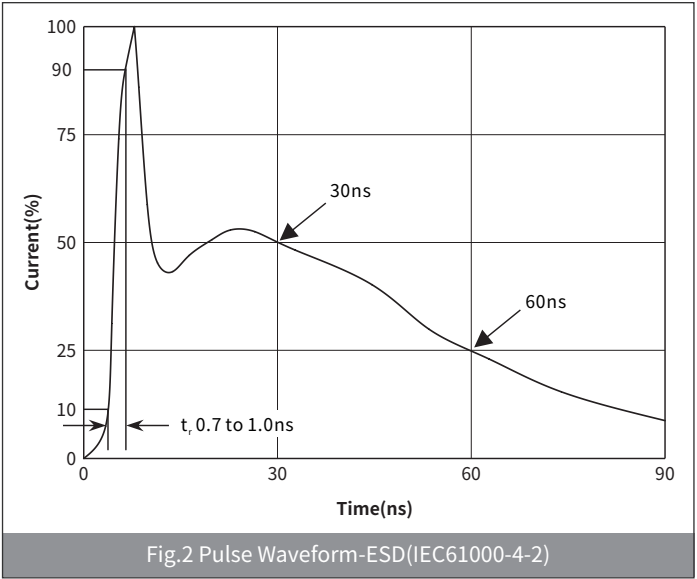
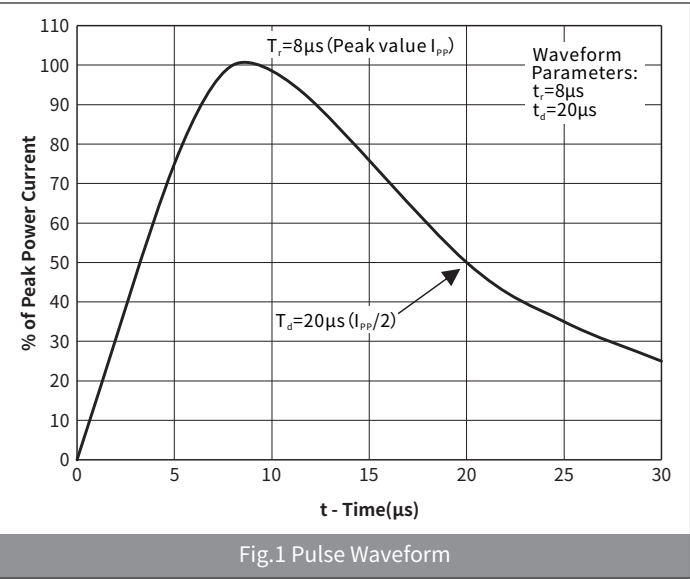
SYMBOL	PARAMETER
V _C	Clamping Voltage @ I _{PP}
V _{BR}	Breakdown Voltage @ I _T
I _{PP}	Peak Pulse Current
I _T	Test Current
I _R	Reverse Leakage Current @ VRWM
V _{RWM}	Peak Reverse Working Voltage
P _{PP}	Peak Pulse Power Dissipation
C _J	Junction Capacitance @ V _R =0V,f=1MHz
I _F	Forward Current
V _F	Forward Voltage @I _F



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

PARAMETER	SYMBOL	CONDITION	Min	Typ	Max	UNIT
Peak Reverse Working Voltage	V_{RWM}	$T_a=25^{\circ}\text{C}$	—	—	5.0	V
Breakdown Voltage	V_{BR}	$I_R=1.0\text{mA}, T_a=25^{\circ}\text{C}$	6.0	—	10	V
Reverse Leakage Current	I_R	$V_{RWM}=5\text{V}, T_a=25^{\circ}\text{C}$	—	—	0.2	μA
Clamping Voltage	V_C	$I_{PP}=2.0\text{A}, t_p=8/20\mu\text{s}$	—	—	12	V
Junction Capacitance	C_J	$V_{RWM}=0\text{V}, f=1\text{MHz}$	—	2.5	3.5	pF

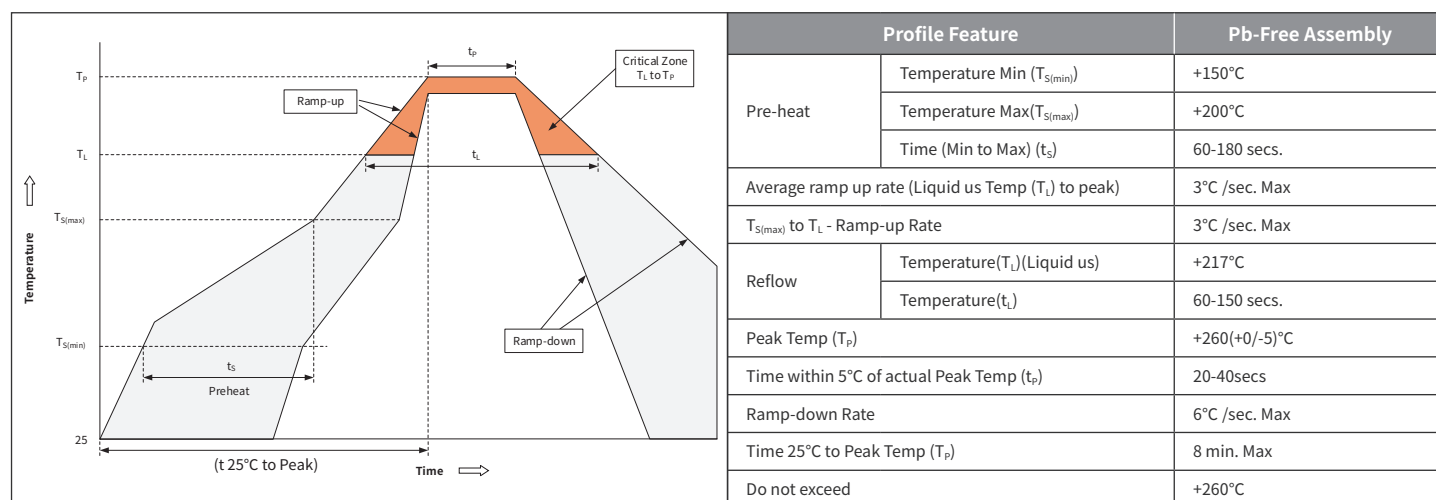
Ratings And Characteristics Curves (Ta=25°C Unless otherwise specified)



● Ordering Information

PREFERED P/N	PACKAGE	SIZE(mm)	DELIVERY MODE	MPQ(PCS)
H5VS10BC	DFN1006-2L	1.00×0.60×0.37	7" REEL	10,000

● Recommended Soldering Conditions



● Package Outline Dimensions (DFN1006-2L)

Symbol	Millimeters(mm)			
	Min.	Max.	Min.	Max.
A	0.950	1.050	0.037	0.041
B	0.550	0.650	0.022	0.026
C	0.350	0.450	0.014	0.018
D	0.550	0.650	0.022	0.026
D ₁	0.280	0.380	0.011	0.015
E	0.450	0.550	0.018	0.022
L	0.000	0.100	0.000	0.004

● Suggested Pad Layout

Symbol	Millimeters(mm)		
	Min.	Type.	Max.
J	0.55	—	—
K	0.28	0.30	0.32
M	0.60	—	—