

DFN0603-2L Plastic-Encapsulate ESD Protection Diodes

Features

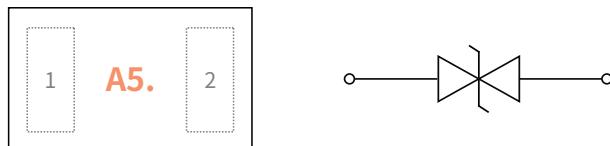
- Low capacitance: 15pF(Typ.)
- Reverse Working Voltage: 5V
- IEC 61000-4-2 (ESD Air): $\pm 30\text{kV}$
- IEC 61000-4-2 (ESD Contact): $\pm 30\text{kV}$
- IEC 61000-4-5 (Lightning 8/20 μs): 8A

Reverse Working Voltage
5V Max.
Normal capacitance
18pF(Max.)

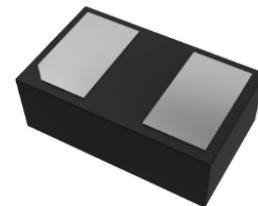
Applications

- Smart Phone and Tablet PC
- TV and Set Top Box
- Wearable Devices
- Digital cameras
- PADs
- SIM ports

Function Diagram



DFN0603-2L

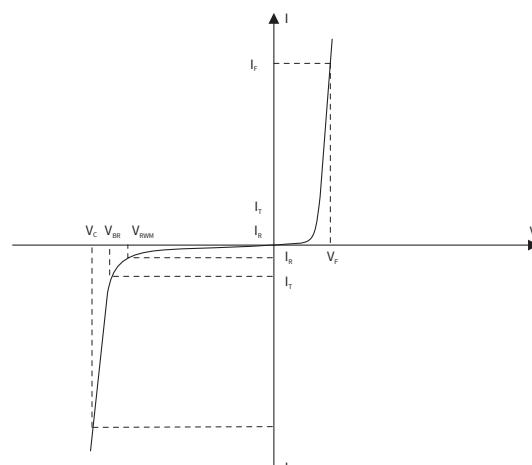


Maximum Ratings (Ta=25°C Unless otherwise specified)

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	80	W
I _{PP}	Rated Peak Pulse Current	tp = 8/20 μs	8.0	A
T _J	Operating JunctionTemperature Range	—	-55 to +125	°C
T _{STG}	Operating JunctionTemperature Range	—	-55 to +150	°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°C	—	—	5.0	V
Breakdown Voltage	V _{BR}	I _R =1.0mA, T _a =25°C	5.6	6.5	8.4	V
Reverse Leakage Current	I _R	V _{RWM} =5.0V, T _a =25°C	—	—	0.1	μA
Clamping Voltage	V _C	I _{PP} =1.0A, t _p =8/20μs	—	—	6.0	V
		I _{PP} =8.0A, t _p =8/20μs	—	—	10	
Junction Capacitance	C _J	V _{RWM} =0V, f=1MHz	—	15	18	pF

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

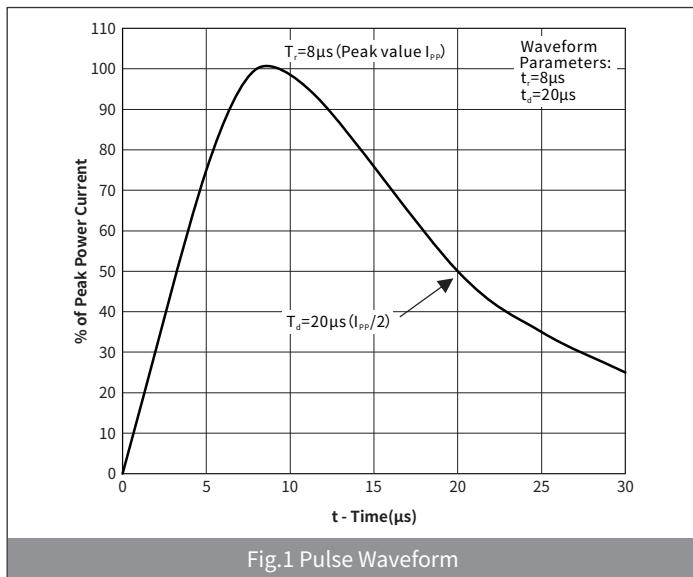


Fig.1 Pulse Waveform

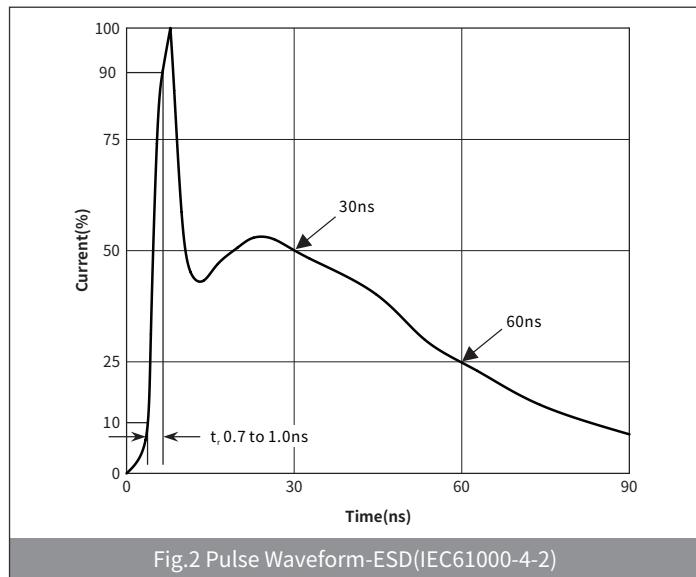


Fig.2 Pulse Waveform-ESD(IEC61000-4-2)

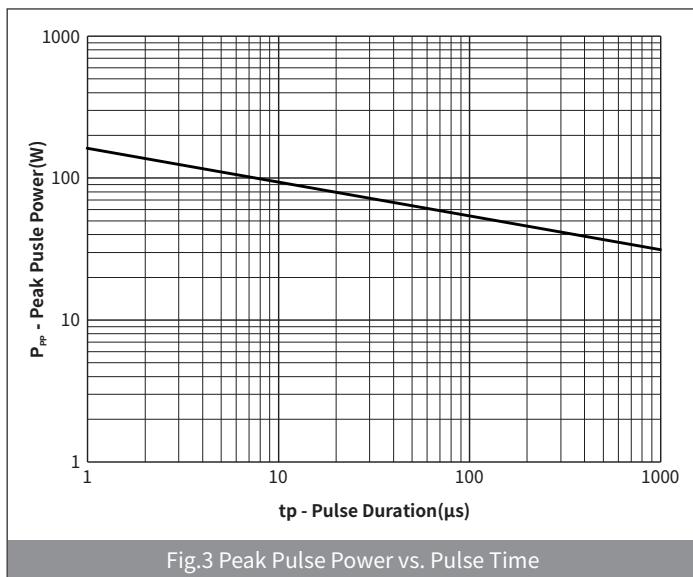


Fig.3 Peak Pulse Power vs. Pulse Time

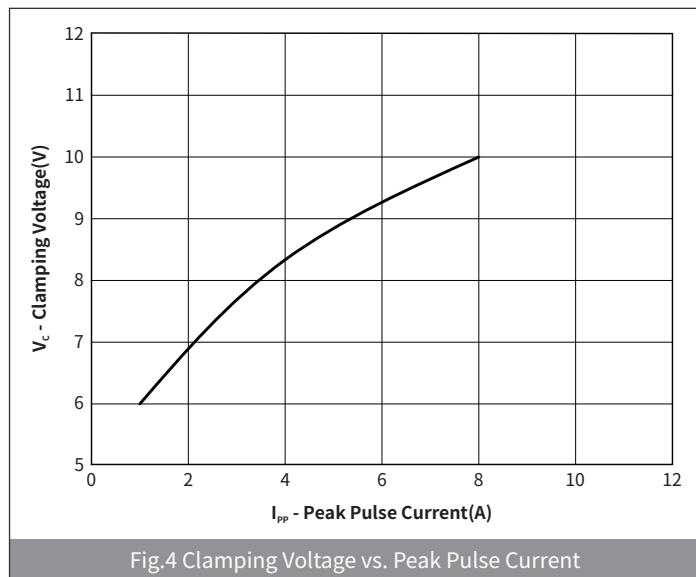
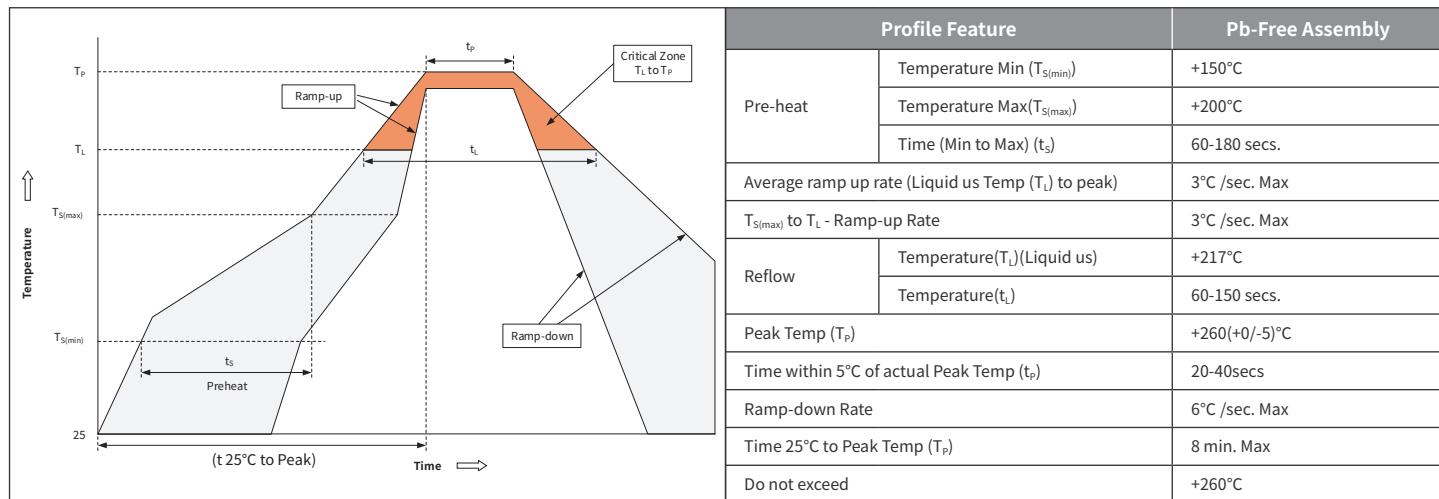


Fig.4 Clamping Voltage vs. Peak Pulse Current

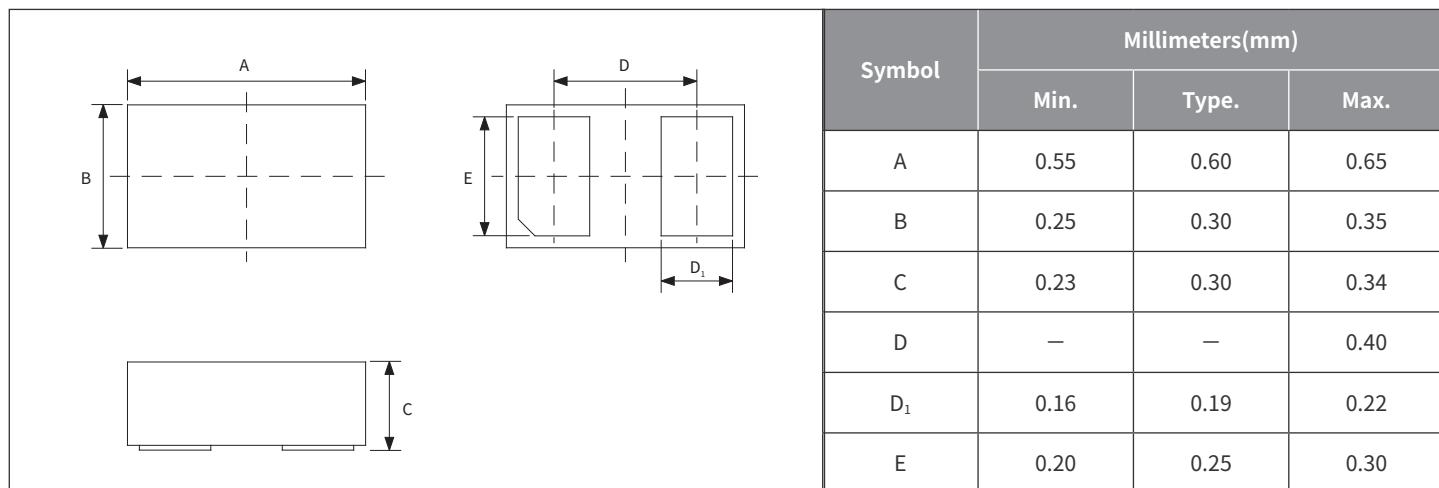
● Ordering Information

PREFERRED P/N	PACKAGE	SIZE(mm)	DELIVERY MODE	MPQ(PCS)
H5VL06B	DFN0603	0.60×0.30×0.30	7" REEL	15,000

● Recommended Soldering Conditions



● Package Outline Dimensions (DFN0603)



● Suggested Pad Layout

