

DFN0603-2L Plastic-Encapsulate ESD Protection Diodes

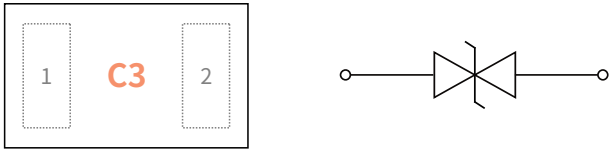
Features

- Low leakage current
- Low clamping voltage
- IEC 61000-4-2 (ESD Air): ±18kV
- IEC 61000-4-2 (ESD Contact): ±15kV
- IEC 61000-4-5 (Lightning 8/20μs): 7A

Applications

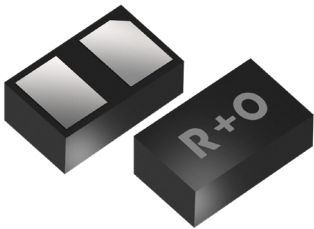
- Cellular Handsets and Accessories
- Personal Digital Assistants
- Notebooks and Handhelds
- Portable Instrumentation, Digital Cameras
- Peripherals, Audio Players
- Industrial Equipment

Function Diagram



Reverse Working Voltage
18V Max.
Ultra Small Capacitance
0.6pF(Typ.)

DFN0603-2L

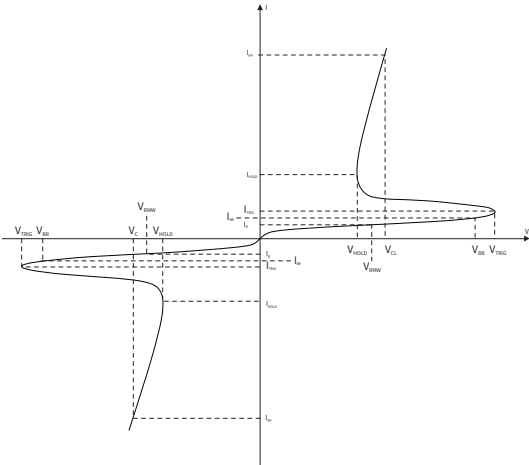


Maximum Ratings (Ta=25°C Unless otherwise specified)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
VESD	Electrostatic Discharge Voltage	ESD per IEC 61000-4-2(Air)	±18	KV
		ESD per IEC 61000-4-2(Contact)	±15	KV
P _{PP}	Peak Pulse Power	tp = 8/20 μs	56	W
I _{PP}	Rated Peak Pulse Current	tp = 8/20 μs	7	A
T _J	Operating JunctionTemperature Range	—	-55 to +125	°C
T _{STG}	Operating JunctionTemperature Range	—	-55 to +125	°C

Electrical Parameter

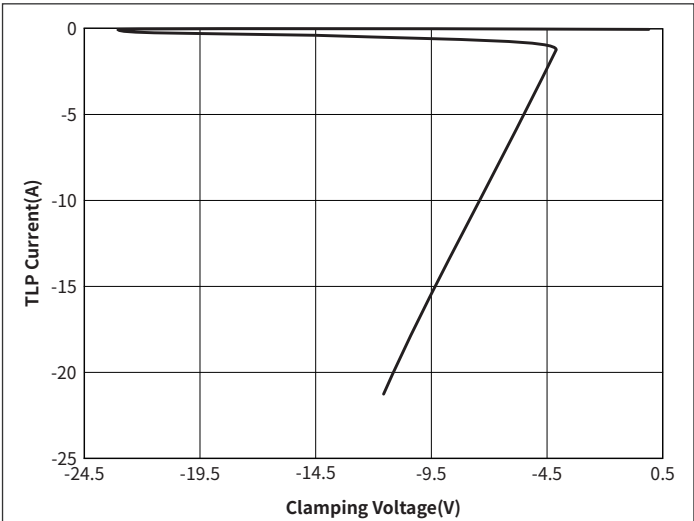
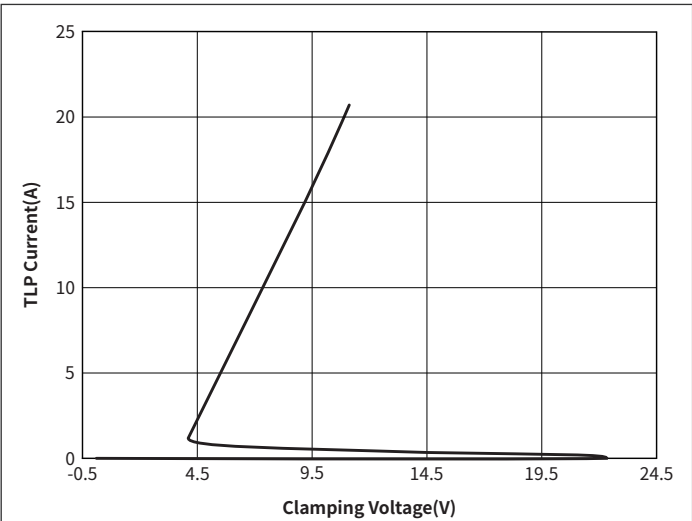
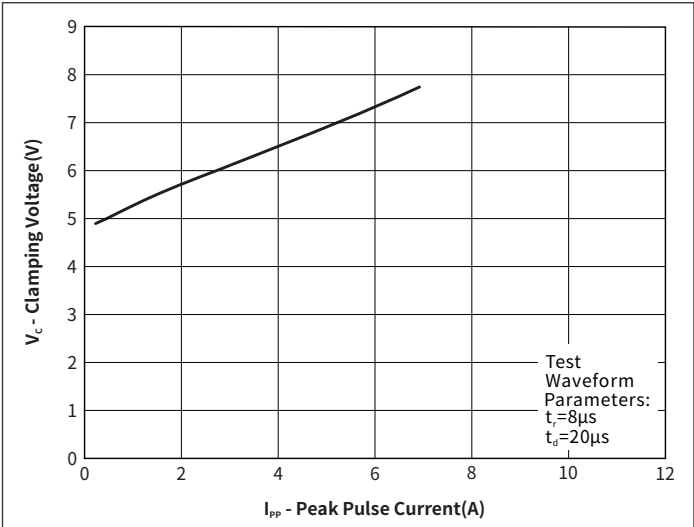
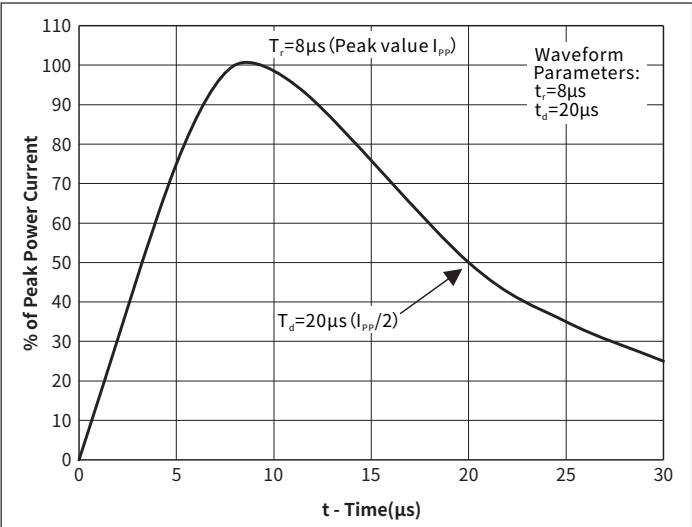
SYMBOL	PARAMETER
I _{PP}	Peak Pulse Current @8/20μs
V _C	Clamping Voltage @ I _{PP}
I _{BR} / I _T	Test Current
V _{BR}	Breakdown Voltage @ I _T
V _{RWM}	Peak Reverse Working Voltage
I _R	Reverse Leakage Current @ V _{RWM}
I _{TRIG}	Reverse Trigger Current
V _{TRIG}	Reverse Trigger Voltage
I _{HOLD}	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}	$T_a=25^{\circ}\text{C}$	—	—	18	V
Trigger Voltage	V_T	$T_a=25^{\circ}\text{C}$	—	22	—	V
Reverse Leakage Current	I_R	$V_R=18\text{V}, T_a=25^{\circ}\text{C}$	—	—	0.5	μA
Holding Current	I_H	$T_a=25^{\circ}\text{C}$	35	—	—	mA
Holding Voltage	V_H	$I_H=35\text{mA}$	—	2.5	—	V
Clamping Voltage	V_C	$I_{PP}=7\text{A}, t_p=8/20\mu\text{s}$	—	—	8.0	V
Junction Capacitance	C_J	$V_{RWM}=0\text{V}, f=1\text{MHz}$	—	0.60	—	pF

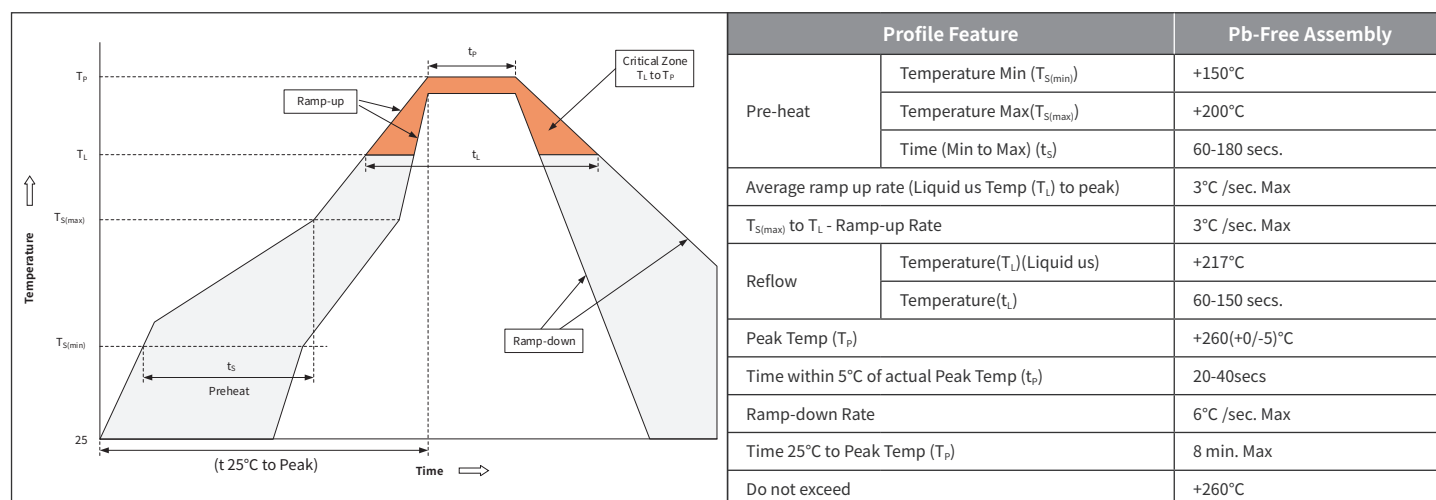
● Ratings And Characteristics Curves (Ta=25°C Unless otherwise specified)



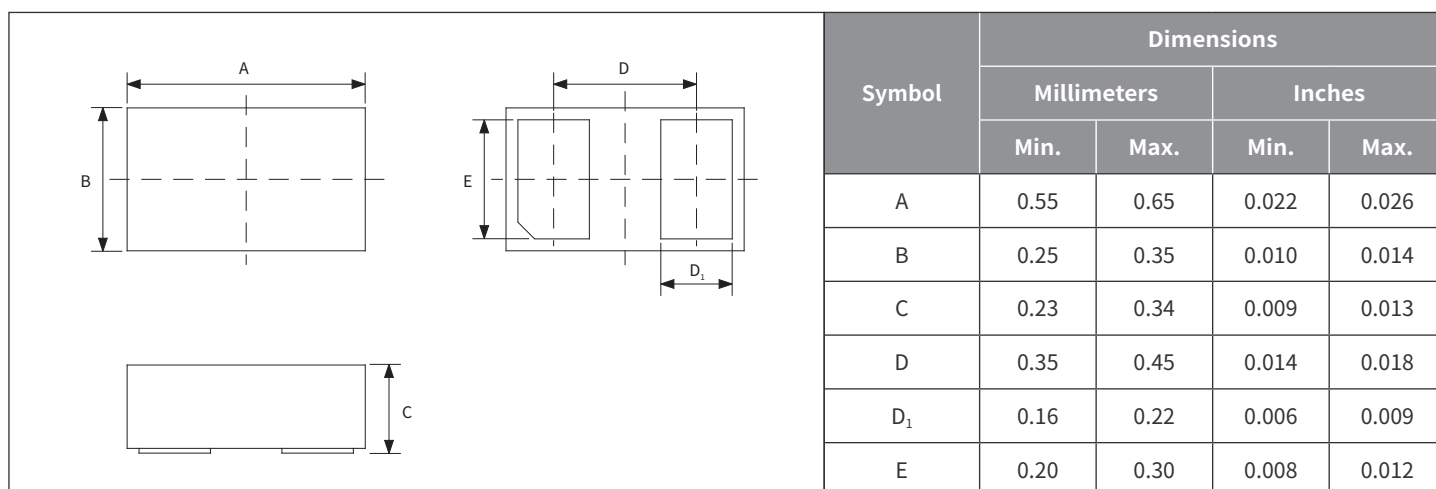
Ordering Information

PREFERED P/N	PACKAGE	SIZE(mm)	DELIVERY MODE	MPQ(PCS)
H18VL06BS	DFN0603-2L	0.6×0.30×0.30	7" REEL	10,000

Recommended Soldering Conditions



Package Outline Dimensions (DFN0603-2L)



Suggested Pad Layout

