

Features

- 80Watts peak pulse power ($t_p = 8/20\mu s$)
- Bi-directional configurations
- Solid-state silicon-avalanche technology
- Capacitance: 15pF typical
- Low clamping voltage
- Low leakage current
- Complies with following standards:
 - IEC 61000-4-2 (ESD) immunity test

Air discharge: $\pm 30KV$

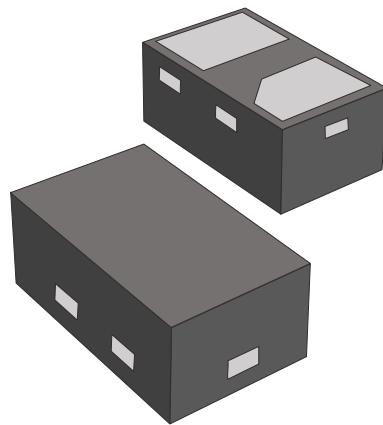
Contact discharge: $\pm 30KV$

– IEC61000-4-4 (EFT) 40A (5/50ns)

– IEC61000-4-5 (Lightning) 8A (8/20us)

DFN0603-2L

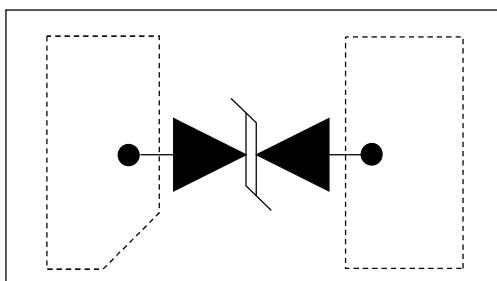
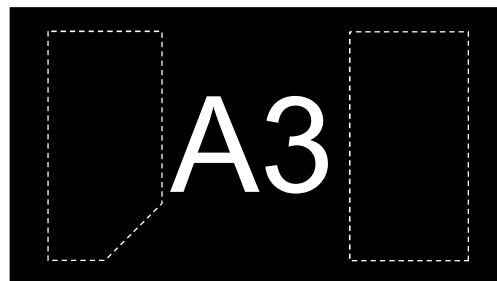
0.6mm×0.3mm×0.3mm

**Applications**

- Cellular Handsets and Accessories
- Personal Digital Assistants
- Notebooks and Handhelds
- Portable Instrumentation
- Digital Cameras
- Peripherals

Mechanical Data

- Package: DFN0603-2L
- UL Flammability Classification Rating 94V-0
- Packaging: Tape and Reel
- RoHS/WEEE Compliant

Schematic & PIN Configuration**Marking**

Absolute Maximum Ratings

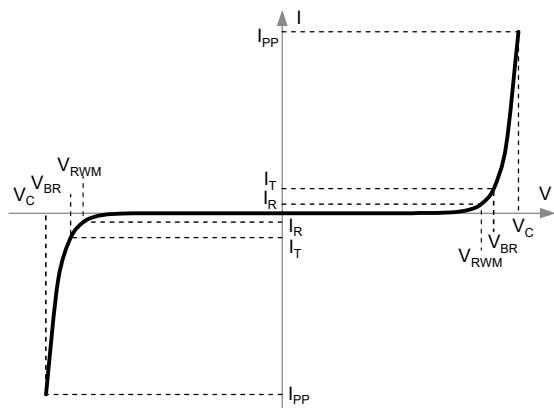
Parameter	Symbol	Value	Units
Reverse Working Voltage	V_{RWM}	3.3	V
Peak Pulse Power ($t_p=8/20\mu s$)	P_{PP}	80	W
Peak Pulse Current ($t_p=8/20\mu s$)	I_{PP}	8	A
ESD per IEC 61000-4-2 (Air)	$V_{ESD-Air}$	30	kV
ESD per IEC 61000-4-2 (Contact)	$V_{ESD-Contact}$	30	kV
Lead Soldering Temperature (10s)	T_L	260	°C
Operating Temperature Range	T_J	-55 to 125	°C
Storage Temperature Range	T_{STG}	-55 to 150	°C

Electrical Characteristics

Parameter	Symbol	Conditions	Min	Typ	Max	Units
Breakdown Voltage	V_{BR}	$I_T = 1mA$	3.5	4.1	5	V
Reverse Leakage Current	I_R	$V_{RWM} = 3.3V$			0.1	uA
Clamping Voltage	V_C	$I_{PP1} = 1A, t_p=8/20\mu s$			6.5	V
Clamping Voltage	V_C	$I_{PP} = 8A, t_p=8/20\mu s$			10	V
Junction Capacitance	C_J	$V_{DC} = 0V, f=1MHz$		15	20	pF

Electrical Parameters

Symbol	Definition
I_{PP}	Peak Pulse Current
V_C	Clamping Voltage
V_{RWM}	Reverse Working Voltage
I_R	Reverse Leakage Current
V_{BR}	Breakdown Voltage
I_T	Test Current



Typical Characteristics

Fig.1 - Peak Pulse Power Rating

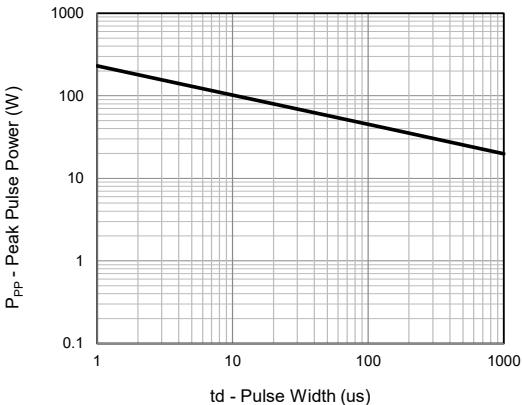


Fig.2 - Pulse Derating Curve

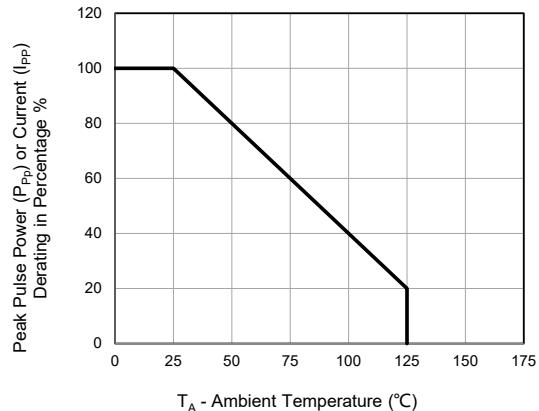


Fig.3 - 8/20us Pulse Waveform

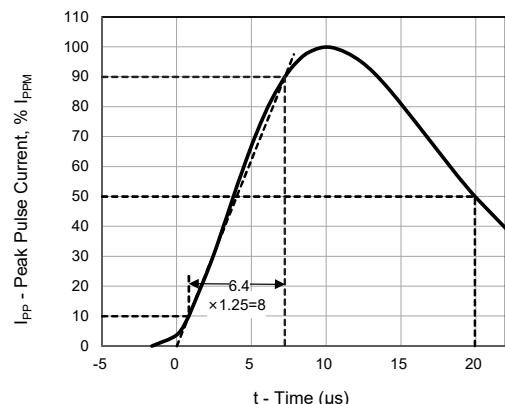


Fig.4 - Typical Clamping Voltage

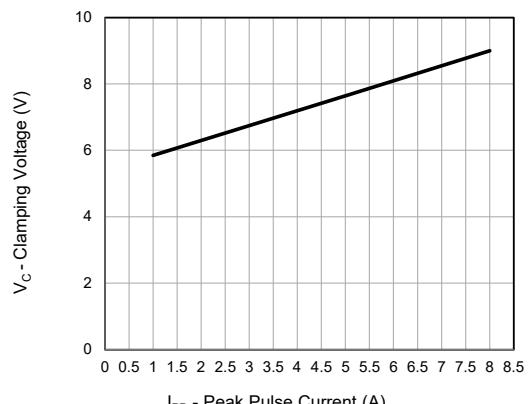


Fig.5 - ESD Pulse Waveform (IEC61000-4-2)

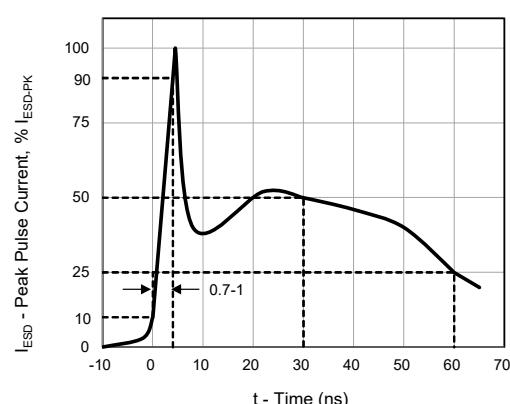
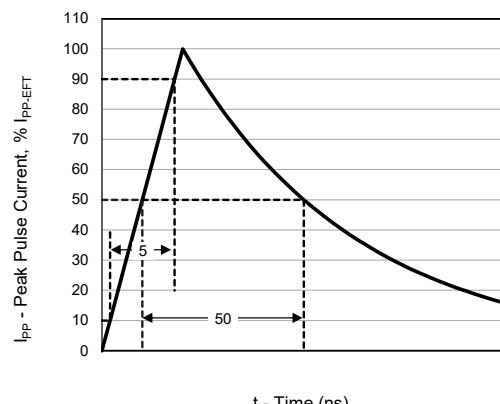
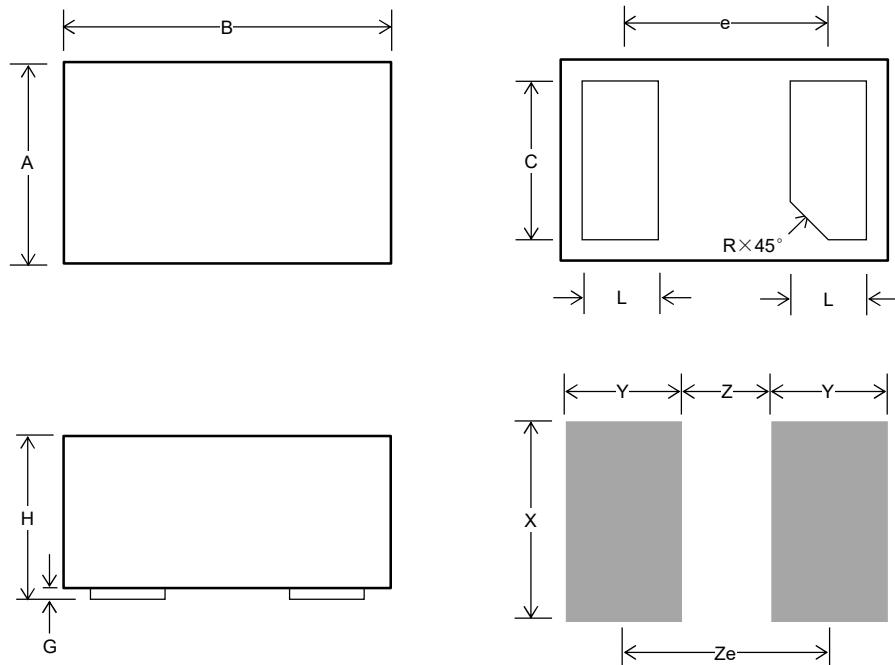


Fig.6 - 5/50ns EFT Waveform (IEC61000-4-4)





Outline Drawing



SYMBOL	Millimeters		
	MIN	NOM	MAX
A	0.25	0.3	0.35
B	0.55	0.6	0.65
C	0.2	0.25	0.3
G	-	0.02	0.05
H	0.28	0.3	0.32
L	0.14	0.19	0.24
e	0.34	0.35	0.37
R	-	0.05	0.1
X		0.27	
Y		0.19	
Z		0.19	
Ze		0.38	

Ordering Information

Order Code	Package	Base Quantity	Delivery Mode
LXT0603F3V3B	DFN0603-2L	10000 PCS/Reel	Tape and Reel