

Features

- Low operating voltage: 5.0V
- Ultra low capacitance: 0.4pF (Typ)
- Ultra low leakage: nA level
- Low clamping voltage
- -IEC 61000-4-2 (ESD) immunity test
 - Air discharge: $\pm 30\text{kV}$
 - Contact discharge: $\pm 30\text{kV}$
- -IEC61000-4-4 (EFT) 40A (5/50ns)
- -IEC61000-4-5 (Lightning) 8A (8/20 μs)
- 2-pin leadless package
- These are Pb-Free Devices
- Response Time is Typically < 1 ns

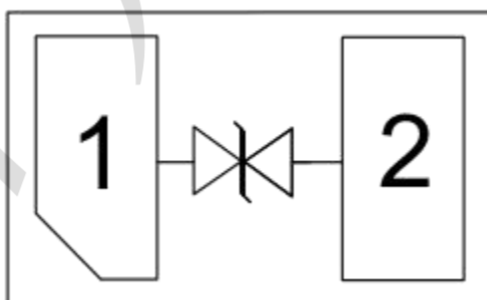
Mechanical Characteristics

- Package: DFN0603-2(0201)
- Lead Finish: Matte Tin
- Case Material: "Green" Molding Compound
- Terminal Connections: See Diagram Below
- -IEC 61000-4-2 (ESD) immunity test

Applications

- Cellular Handsets and Accessories
- Personal Digital Assistants
- Notebooks and Handhelds
- Portable Instrumentation
- USB 2.0 power and data line

Dimensions and Pin Configuration



Absolute Maximum Ratings (Tamb=25°C unless otherwise specified)

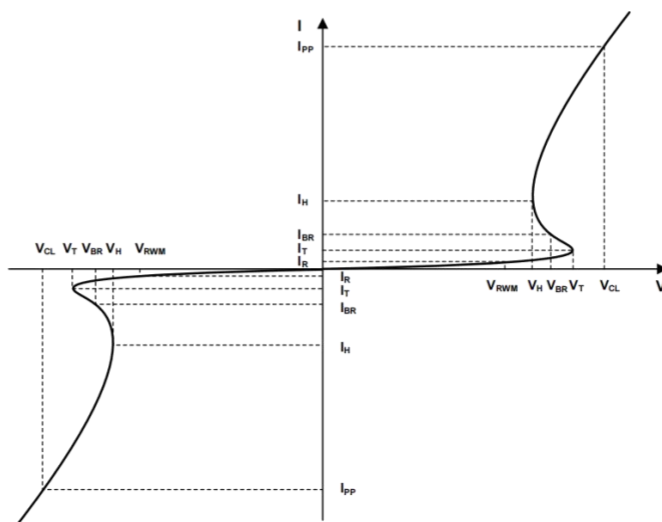
Parameter	Symbol	Value	Unit
Peak Pulse Power (8/20μs)	Ppk	72	W
Peak Pulse Current (8/20μs)	Ipp	8	A
ESD per IEC 61000-4-2 (Air) ESD per IEC 61000-4-2 (Contact)	VESD	±30 ±30	KV
Operating Temperature Range	TJ	-55 to +125	°C
Storage Temperature Range	Tstg	-55 to +150	°C

Electrical Characteristics (TA=25°C unless otherwise specified)

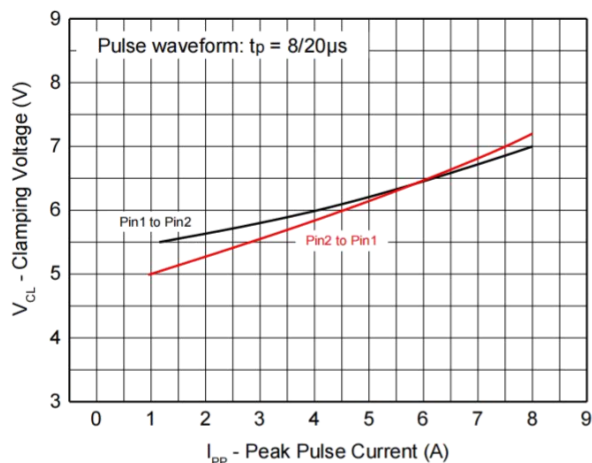
Parameter	Symbol	Min	Typ	Max	Unit	Test Condition
Reverse Working Voltage	VRWM	--	--	5.0	V	
Breakdown Voltage	VBR	5.8	--	--	V	IT= 1mA
Reverse Leakage Current	IR	--	--	500	nA	VRWM=5.0V
Clamping Voltage	VC	--	5.5	7.0	V	Ipp=1A(8x 20us pulse)
Clamping Voltage	VC	--	7.5	10	V	Ipp=8A(8x 20us pulse)
Junction Capacitance	CJ	--	0.4	0.6	pF	VR = 0V, f = 1MHz

Electrical Characteristics

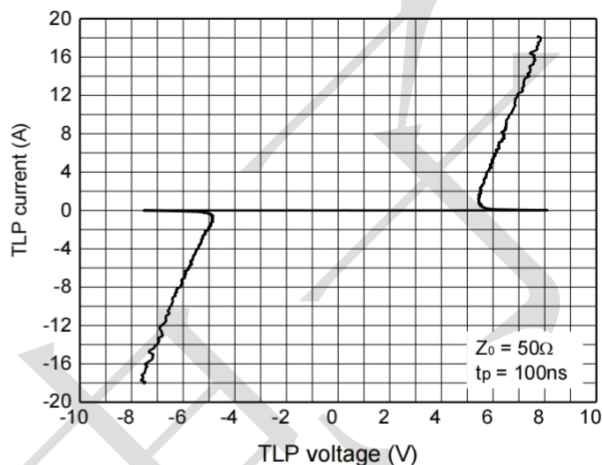
Symbol	Parameter
VBR	Reverse Breakdown Voltage
IBR	Reverse Breakdown Current
VRWM	Reverse Stand-off Voltage
IR	Reverse Leakage Current
VH	Holding Voltage
IH	Holding Current
VT	Trigger Voltage
IT	Trigger Current
Ipp	Peak Pulse Current
VCL	Clamping Voltage



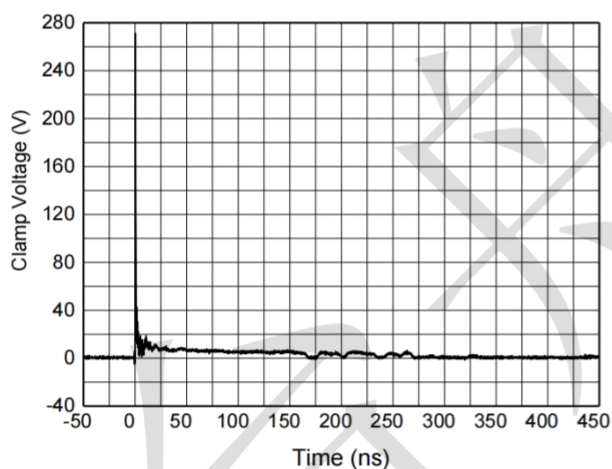
Characteristic Curves



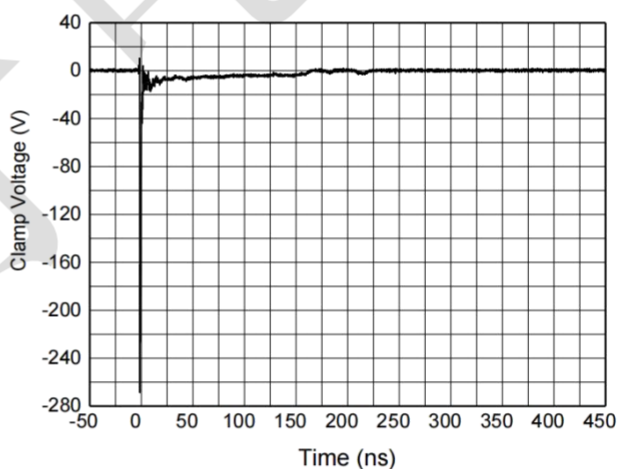
Clamping Voltage vs. Peak Pulse Current



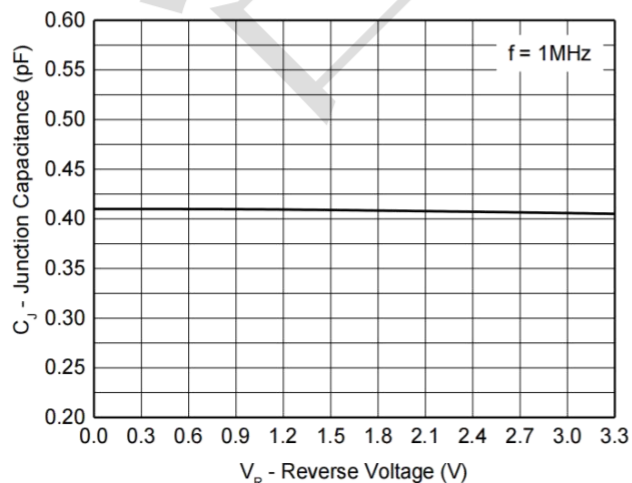
TLP IV Curve



+8kV contact discharge per IEC61000-4-2



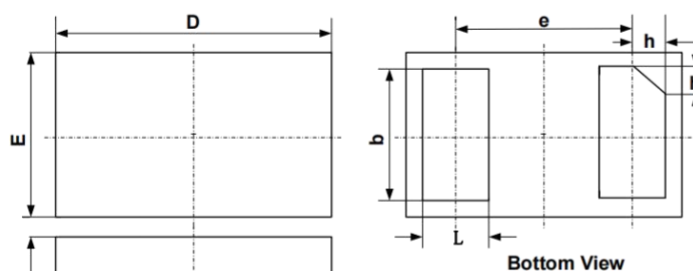
-8kV contact discharge per IEC61000-4-2



Capacitance vs. Reverse Voltage

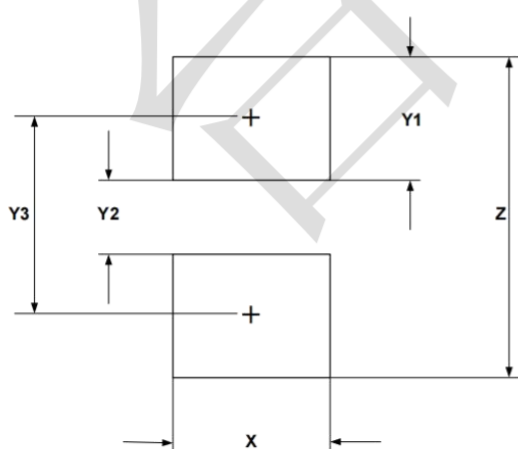
Package Outline & Dimensions

DFN0603-2 (0201)



SYM	DIMENSIONS		
	MILLIMETERS		
	MIN	NOM	MAX
A	0.230	0.300	0.330
A1	0.000	0.020	0.050
b	0.215	0.245	0.275
c	0.120	0.150	0.180
D	0.550	0.600	0.650
e	0.355 BSC		
E	0.250	0.300	0.350
L	0.160	0.190	0.220
h	0.079 BSC		

Suggested Land Pattern



SYM	DIMENSIONS	
	MILLIMETERS	INCHES
X	0.30	0.012
Y1	0.25	0.010
Y2	0.15	0.006
Y3	0.40	0.016
Z	0.65	0.026