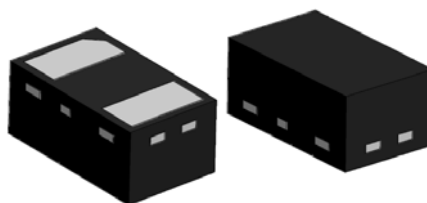
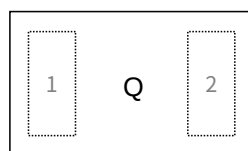


Transient Voltage Suppressors for ESD Protection General Description

DFN0603-2L



Package Outline



MARKING: Q

Features

- ◇ Transient protection for high-speed data lines
- ◇ IEC 61000-4-2 (ESD) $\pm 25\text{kV}$ (Air)
- ◇ Protects one high-speed data line
Low reverse current: $<10\text{nA}$ typical ($V_R=5\text{V}$)
Working voltage: 3.5V
- ◇ Low capacitance: 0.35pF typical
- ◇ Dynamic resistance: $0.90\ \Omega$ (Typ)
- ◇ Solid-state silicon-avalanche technology

Applications

- ◇ HDMI 1.3/1.4 and HDMI 2.0
- ◇ USB 2.0 and USB 3.0
- ◇ MHL
- ◇ LVDS Interfaces
- ◇ FM Antenna
- ◇ PCI Express
- ◇ eSATA Interfaces

Maximum Ratings (Ta = 25℃)

Rating	Symbol	Value	Units
PPK	Ppk	60	Watts
IPP	IPP	4	A
VESD (Contact)	VESD	± 25	kV
VESD (Air)	VESD	± 22	kV
TJ	TJ	-55 to +125	℃
TSTG	TSTG	-55 to +150	℃

Electrical Characteristics (Ta = 25℃)

Symbol	Parameter	Conditions	Min	Typ	Max	Unit
VRWM	Reverse Working Peak Voltage				3.5	V
VBR	Reverse Breakdown Voltage	IT = 1mA	7	9	10	V
IR	Reverse Leakage Current	VRWM = 3.5V			1	μA
VC	Clamping Voltage	IPP = 1A, tp = 8/20μs			11	V
VC	Clamping Voltage	I = 4A, tp = 8/20μs			15	V
CJ	Capacitance	VR = 0V, f = 1MHz		0.35	0.5	pF

SURGE CURRENT WAVEFORM:

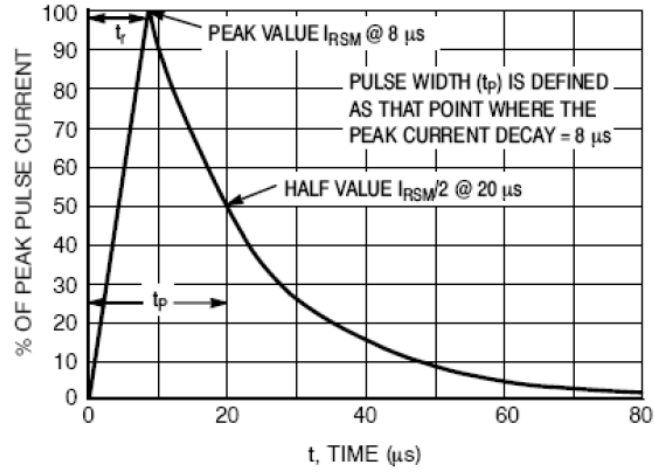
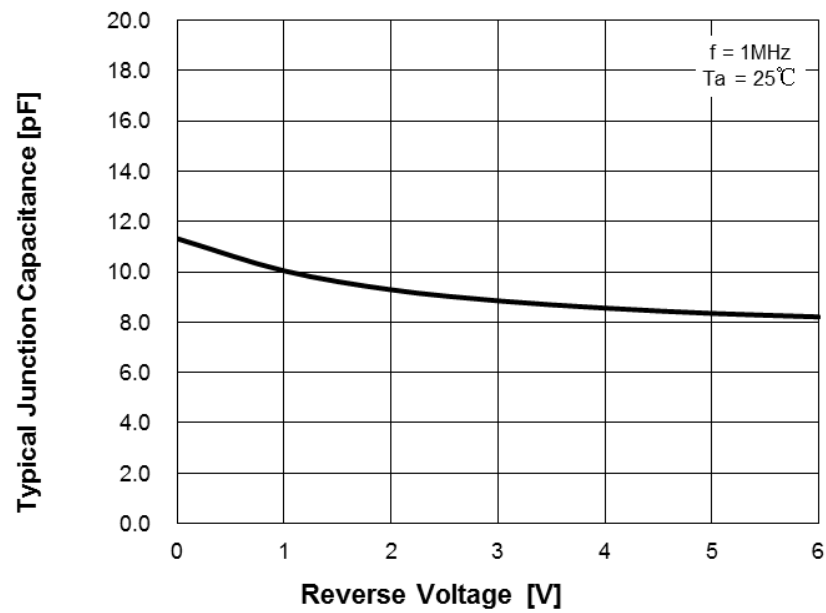
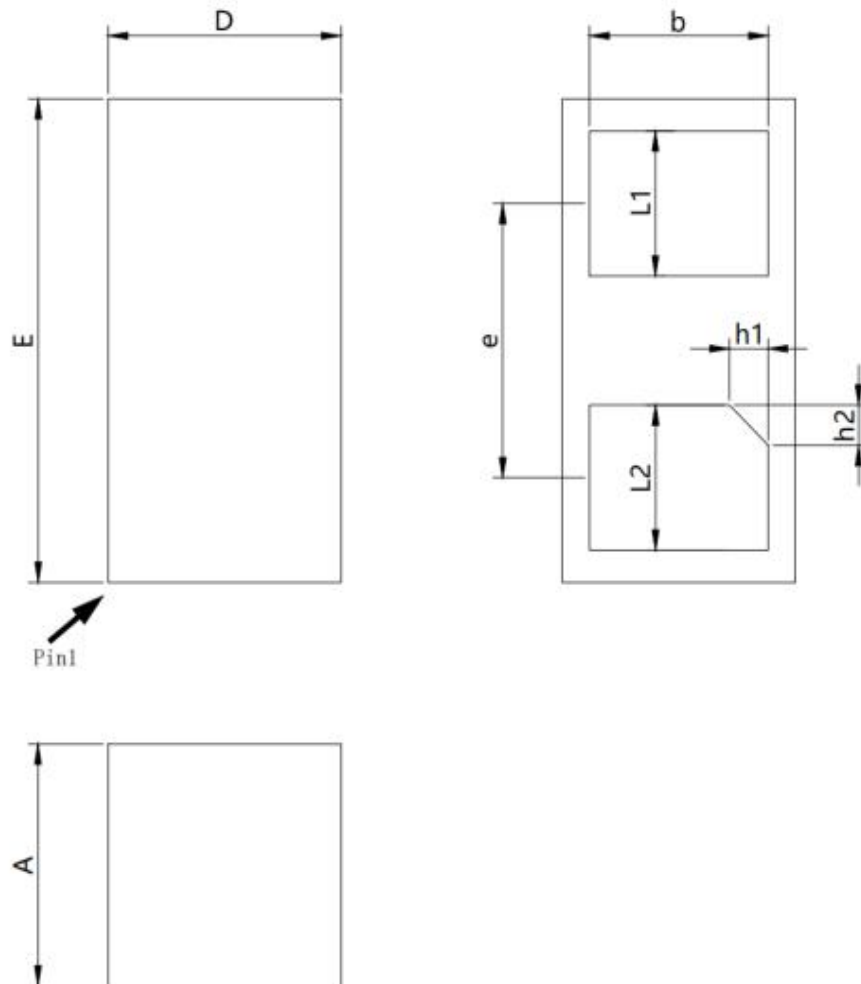


Figure 1. 8 x 20 μs Pulse Waveform

CAPACITANCE CURVE:



DFN0603 Package Outline Drawing



DFN0.6*0.3*0.3-2L REV.D POD			
	min(mm)	typ(mm)	max(mm)
D	0.25	0.30	0.35
E	0.55	0.60	0.65
L1	0.155	0.18	0.205
L2	0.155	0.18	0.205
b	0.205	0.23	0.255
e	0.205	0.34	0.365
h1	0.025	0.05	0.075
h2	0.025	0.05	0.075
A	-	0.30	0.35