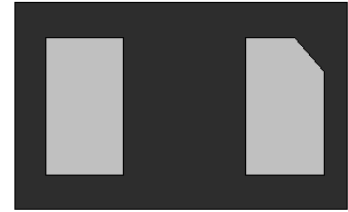
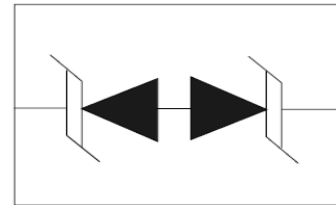


Features

- Transient protection for high-speed data lines
IEC 61000-4-2 (ESD) $\pm 20\text{kV}$ (Contact)
IEC 61000-4-2 (ESD) $\pm 25\text{kV}$ (Air)
IEC 61000-4-5 (Surge) 5A (8/20 μs)
- Ultra-small package
- Protects one data, control or power line
- Low capacitance
- Low leakage current
- Low clamping voltage
- Compliant to Halogen-free
- Suffix "-Q1" for AEC-Q101



DFN-2L(0402)



Pin Configuration

Applications

- Serial and Parallel Ports
- Notebooks, Desktops, Servers
- Projection TV
- Cellular handsets and accessories
- Portable instrumentation
- Peripherals
- MP3 Players

Mechanical Data

- DFN-2L package
- Molding compound flammability rating : UL 94V-0
- Marking code : MOC

Absolute Maximum Ratings ($T_A=25^\circ\text{C}$ unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{ESD}	ESD per IEC 61000-4-2 (Contact)	± 20	kV
	ESD per IEC 61000-4-2 (Air)	± 25	
P_{PP}	Peak Pulse Power ($t_p=8/20\mu\text{s}$ waveform)	130	W
T_J	Operating Temperature Range	$-55\sim 125$	$^\circ\text{C}$
T_{STG}	Storage Temperature Range	$-55\sim 150$	$^\circ\text{C}$
T_L	Lead Solder Temperature-Maximum (10 Second Duration)	260	$^\circ\text{C}$

Electrical Characteristics ($T_A=25^\circ\text{C}$ unless otherwise noted)

Symbol	Parameter	Test Condition	Min	Typ	Max	Units
V_{RWM}	Reverse Working Voltage				12.0	V
V_{BR}	Reverse Breakdown Voltage	$I_T = 1\text{mA}$	13.3		16.3	V
I_R	Reverse Leakage Current	$V_{\text{RWM}} = 12\text{V}$			0.2	μA
V_C	Clamping Voltage	$I_{\text{PP}} = 1\text{A}, t_p = 8/20\mu\text{s}$			19	V
		$I_{\text{PP}} = 5\text{A}, t_p = 8/20\mu\text{s}$			26	V
C_J	Junction Capacitance	$V_R = 0\text{V}, f = 1\text{MHz}$		7	10	pF

Typical Characteristics

Fig 1 8/20 μ s Waveform per IEC61000-4-5

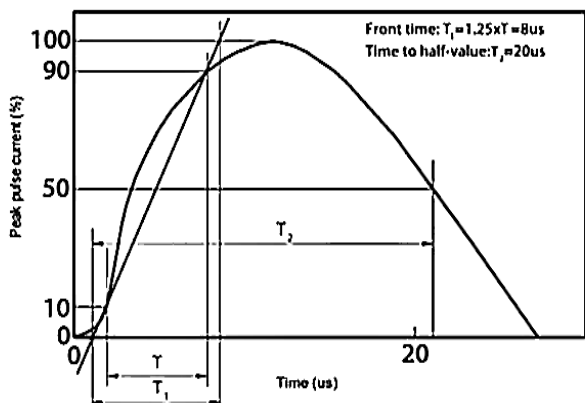


Fig 2 Contact Discharge Current Waveform per IEC 61000-4-2)

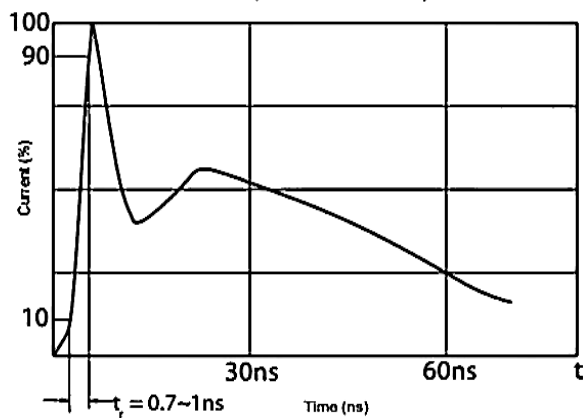


Fig 3 Clamping Voltage vs Peak Pulse Current

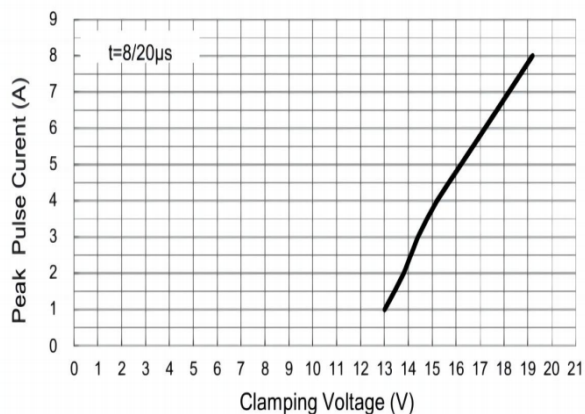
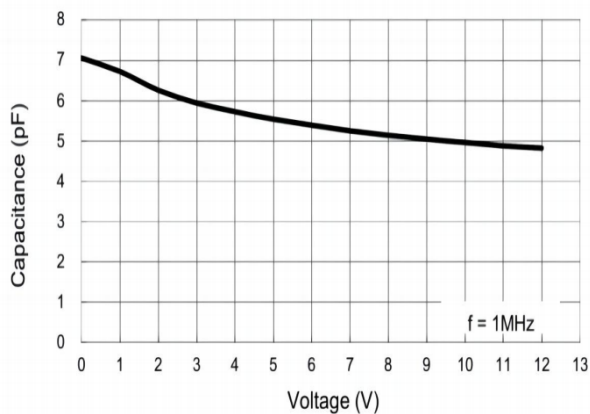
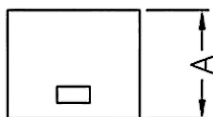
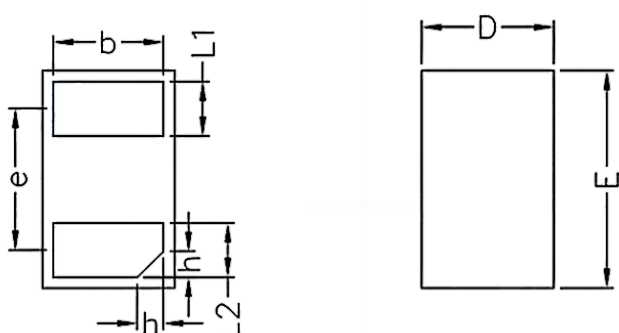


Fig 4 Voltage vs Capacitance



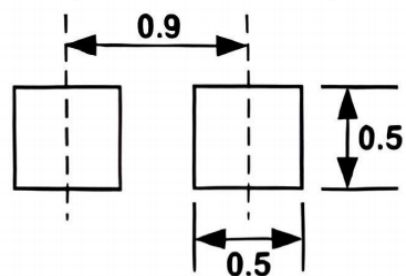
Package Dimensions



Unit: mm

	MIN	NOM	MAX
D	0.55	0.60	0.65
E	0.95	1.00	1.05
L1	0.20	0.25	0.30
L2	0.20	0.25	0.30
b	0.45	0.50	0.55
e	0.65BSC		
A	0.45	0.50	0.55
h	0.07	0.12	0.17

Dimension: Millimeter
(Stencil thickness: 0.1)



Soldering Footprint