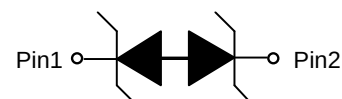


Features

- Reverse stand-off voltage: $\pm 5V$ Max.
- Transient protection for each line according to
IEC61000-4-2 (ESD): $\pm 30kV$ (contact and air discharge)
IEC61000-4-4 (EFT): 40A (5/50ns)
IEC61000-4-5 (surge): 8A (8/20 μs)
- Capacitance: $C_J = 17.5pF$ typ.
- Low leakage current: $I_R < 1nA$ typ.
- Low clamping voltage: $V_{CL} = 9V$ typ. @ $I_{PP} = 16A$ (TLP)
- Small package



DFN0603-2L



Applications

- Cellular handsets
- Tablets
- Laptops
- Other portable devices
- Network communication devices

Absolute maximum ratings

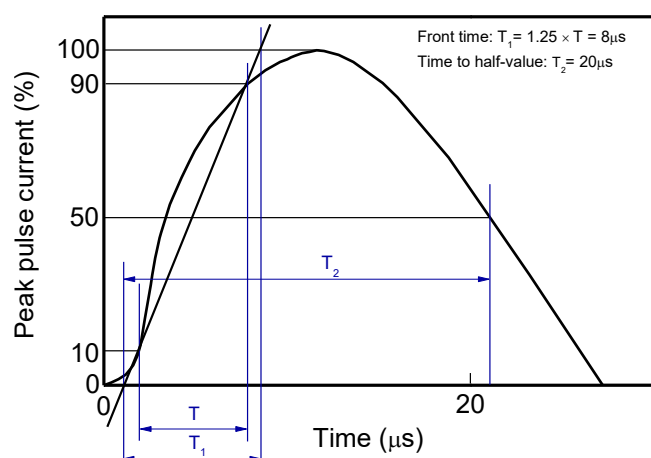
Parameter	Symbol	Rating	Unit
Peak pulse power ($t_p = 8/20\mu s$)	P_{pk}	80	W
Peak pulse current ($t_p = 8/20\mu s$)	I_{PP}	8	A
ESD according to IEC61000-4-2 air discharge	V_{ESD}	± 30	kV
ESD according to IEC61000-4-2 contact discharge		± 30	
Junction temperature	T_J	125	$^{\circ}C$
Operating temperature	T_{OP}	-40~85	$^{\circ}C$
Lead temperature	T_L	260	$^{\circ}C$
Storage temperature	T_{STG}	-55~150	$^{\circ}C$

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

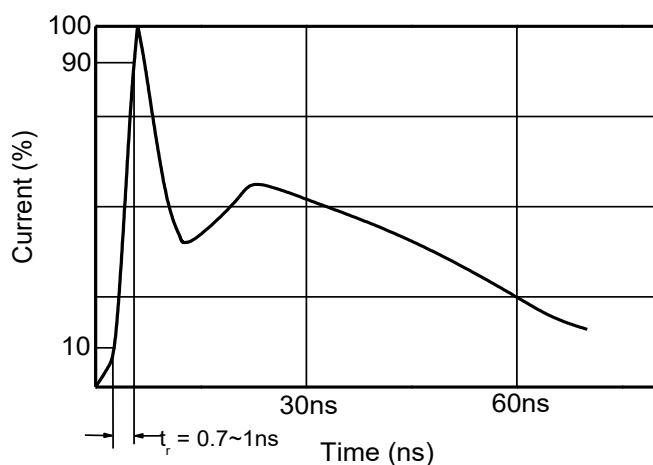
Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Reverse stand-off voltage	V_{RWM}				± 5	V
Reverse leakage current	I_R	$V_{RWM} = 5.0\text{V}$		<1	100	nA
Reverse breakdown voltage	V_{BR}	$I_{BR} = 1\text{mA}$	5.1			V
Reverse holding voltage	V_{HOLD}	$I_{HOLD} = 50\text{mA}$	5.1			V
Clamping voltage ¹⁾	V_{CL}	$I_{PP} = 16\text{A}$, $t_p = 100\text{ns}$		9		V
Clamping voltage ²⁾	V_{CL}	$V_{ESD} = 8\text{kV}$		9		V
Clamping voltage ³⁾	V_{CL}	$I_{PP} = 1\text{A}$, $t_p = 8/20\mu\text{s}$			6.5	V
		$I_{PP} = 5\text{A}$, $t_p = 8/20\mu\text{s}$			8.5	V
		$I_{PP} = 8\text{A}$, $t_p = 8/20\mu\text{s}$			10	V
Dynamic resistance ¹⁾	R_{DYN}			0.20		Ω
Junction capacitance	C_J	$V_R = 0\text{V}$, $f = 1\text{MHz}$		17.5	22	pF
		$V_R = 5.0\text{V}$, $f = 1\text{MHz}$		11.5	16	pF

Notes:

- 1) TLP parameter: $Z_0 = 50\Omega$, $t_p = 100\text{ns}$, $t_r = 2\text{ns}$, averaging window from 60ns to 80ns. R_{DYN} is calculated from 4A to 16A.
- 2) Contact discharge mode, according to IEC61000-4-2.
- 3) Non-repetitive current pulse, according to IEC61000-4-5.

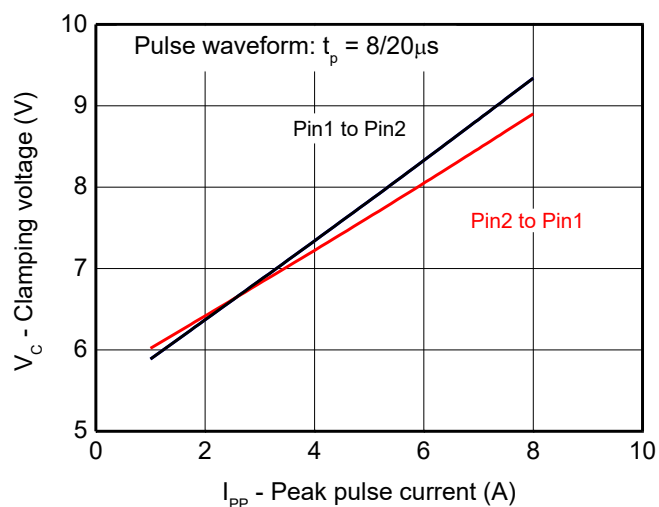


8/20 μs waveform per IEC61000-4-5

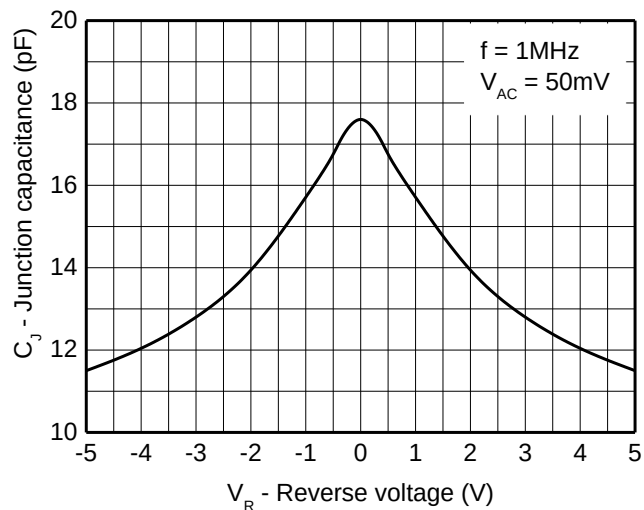


Contact discharge current waveform per IEC61000-4-2

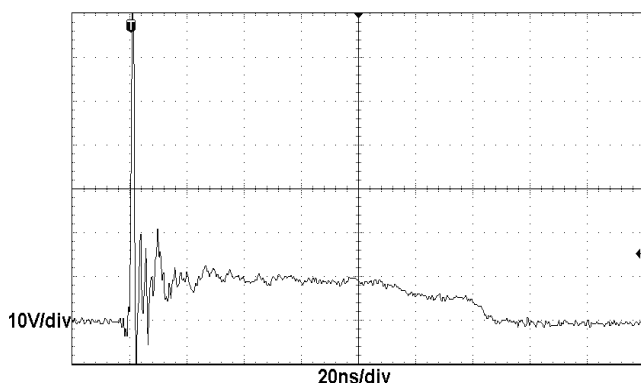
Typical characteristics ($T_A=25^\circ\text{C}$, unless otherwise noted)



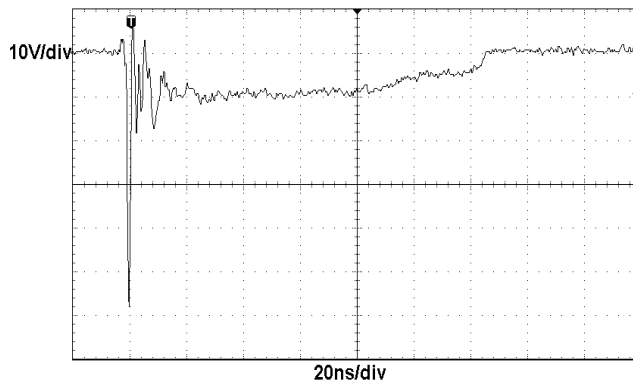
Clamping voltage vs. Peak pulse current



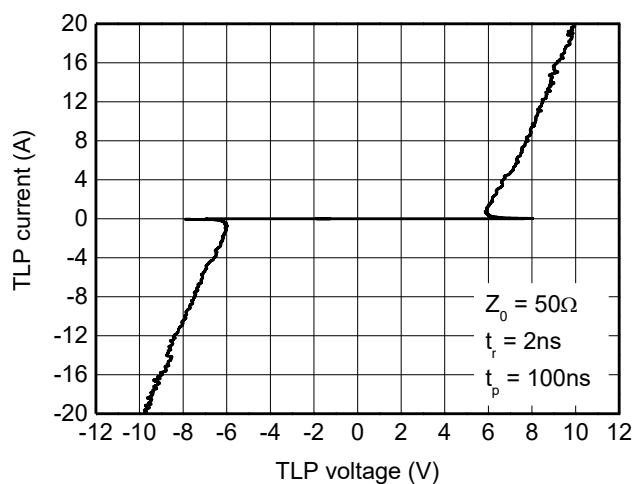
Capacitance vs. Reverse voltage



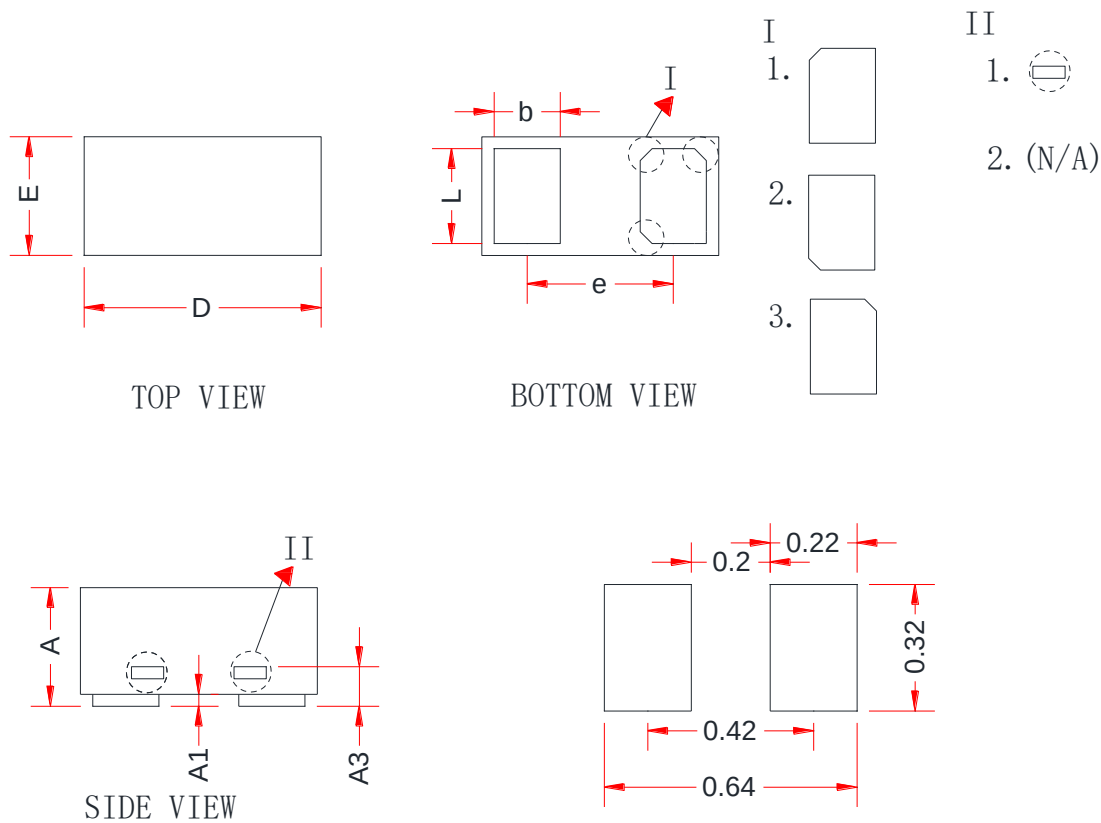
ESD clamping
(+8kV contact discharge per IEC61000-4-2)



ESD clamping
(-8kV contact discharge per IEC61000-4-2)



TLP Measurement

PACKAGE OUTLINE DIMENSIONS
DFN0603-2L


Symbol	Dimensions in Millimeters		
	Min.	Typ.	Max.
A	0.23	0.30	0.34
A1	0.00	0.03	0.05
A3	0.10 Ref.		
D	0.55	0.60	0.67
E	0.25	0.30	0.37
b	0.10	0.15	0.22
L	0.20	0.24	0.30
e	0.40 Ref		