

Features

- Small body outline dimensions: 0.6mm x 0.3mm
- Protects one I/O or power line
- Low clamping voltage
- Ultra low capacitance:0.15Pf
- Working voltage: 5 V
- Low leakage current

Mechanical Characteristics

- DFN0603-2L package
- Marking: Marking Code
- Packaging: Tape and Reel per EIA 481
- RoHS Compliant

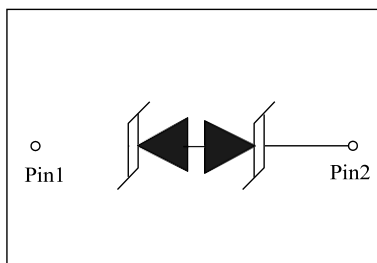
Applications

- HDMI 1.4 and HDMI 2.0
- USB 3.0 and USB 3.1
- USB Type-C
- Thunderbolt
- MIPI/MDDI
- 10GbE
- DVI

IEC COMPATIBILITY (EN61000-4)

- IEC 61000-4-2 (ESD) $\pm 12\text{kV}$ (air), $\pm 12\text{kV}$ (contact)
- IEC 61000-4-4 (EFT) 40A (5/50ns)
- IEC 61000-4-5 (Lightning) 3A (8/20 μs)

Pin Configuration

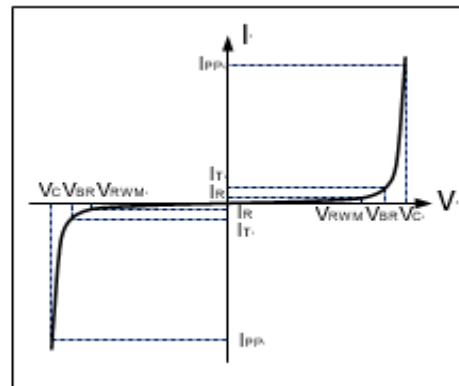


Absolute Maximum Ratings(Ta=25°C)

Rating	Symbol	Value	Units
Peak Pulse Power (tp=8/20μs)	PPp	75	W
Peak Pulse Current (tp=8/20μs)	IPP	3	A
Operating Temperature	TJ	-55 to + 125	°C
Storage Temperature	TSTG	-55 to +150	°C

Electrical Parameters (Ta=25°C)

Symbol	Parameter
IPP	Reverse Peak Pulse Current
VC	Clamping Voltage @ IPP
VRWM	Reverse Stand-Off Voltage
IR	Reverse Leakage Current @ VRWM
VBR	Breakdown Voltage @ IR
IT	Test Current

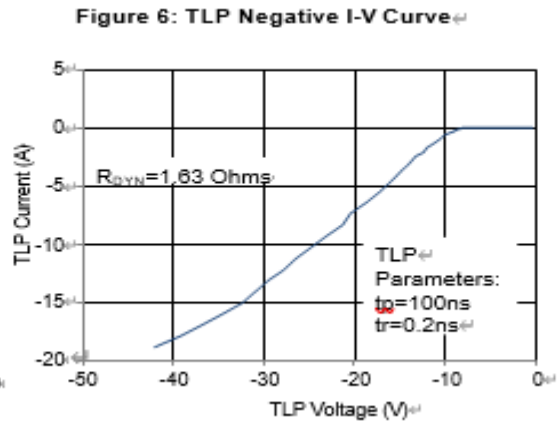
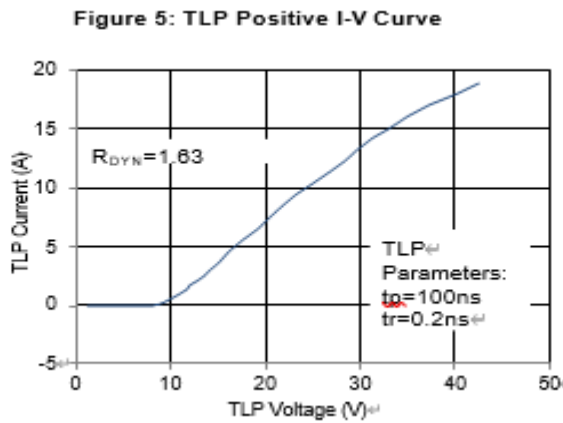
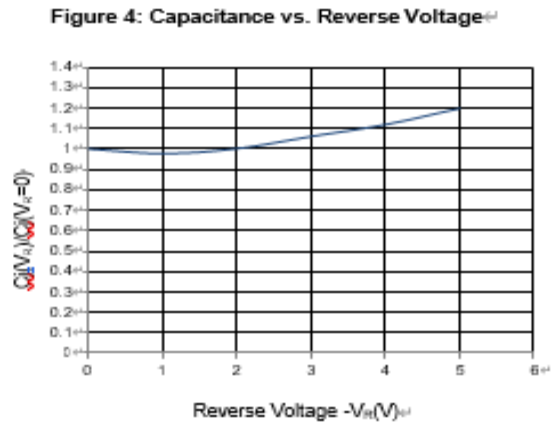
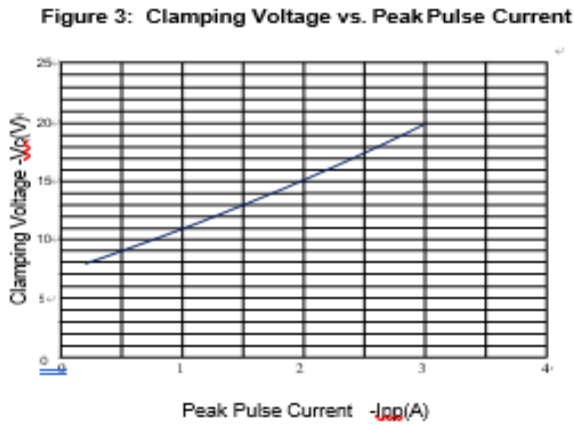
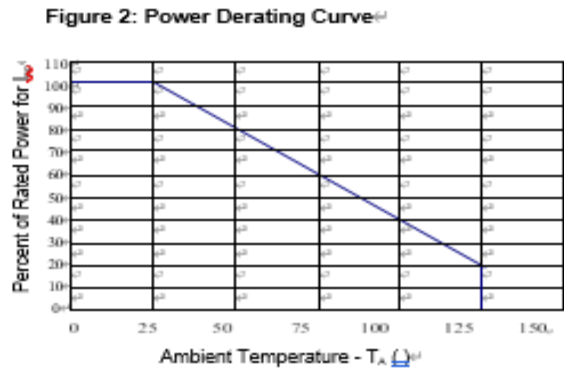
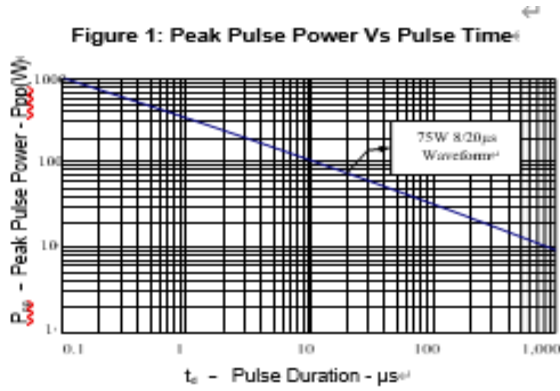


Electrical Characteristics

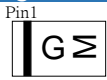
Parameter	Symbol	Conditions	Minimum	Typical	Maximum	Units
Reverse Stand-Off Voltage	V_{RWM}				5	V
Reverse Breakdown Voltage	V_{BR}	$I_T=1mA$	6			V
Reverse Leakage Current	I_R	$V_{RWM}=5V,$ $T=25^{\circ}C$			500	nA
Clamping Voltage	V_C	$I_{PP}=3A, t_p=8/20\mu s$		20	25	V
ESD Clamping Voltage ¹	V_C	$I_{PP} = 4A$ $t_p = 0.2/100ns$		15.5		V
ESD Clamping Voltage ¹	V_C	$I_{PP} = 16A$ $t_p = 0.2/100ns$		35		V
Dynamic Resistance ^{1,2}	R_{DYN}	$TLP=0.2/100ns$		1.63		Ω
Junction Capacitance	C_j	$V_R = 0V, f= 1MHz$		0.15	0.23	pF

Note: 1、TLP Setting : $t_p=100ns, t_r=0.2ns, I_{TLP}$ and V_{TLP} sample window: $t_1=70ns$ to $t_2=90ns$.
2、Dynamic resistance calculated from $I_{PP}=4A$ to $I_{PP}=16A$ using 'Best Fit'

Typical Characteristics



Marking code



G=Specific Device Code
M=Month Code

Package Information

Qty: 15k/Reel

Outline Drawing – DFN0603-2L

PACKAGE OUTLINE

Bottom View Top View

Side View

DFN0603-2L

SYMBOL	MILLIMETERS			Dimension In Inches		
	NOM	MIN	MAX	NOM	MIN	MAX
A	--	0.280	0.320	--	0.011	0.013
A1	--	--	0.050	--	--	0.002
D	0.610	0.570	0.630	0.024	0.022	0.025
E	0.310	0.270	0.330	0.012	0.011	0.013
b	0.180	0.155	0.205	0.007	0.006	0.008
L	0.240	0.200	0.260	0.009	0.008	0.010
h	--	0.050	0.100	--	0.002	0.004
L1	0.035REF			0.001REF		
L2	0.035REF			0.001REF		
e	0.360BSC			0.014BSC		

Land Pattern