LTVS16H16T5G

1-Line Uni-directional TVS Diode

LTVS16H16T5G

The LTVS16H16T5G is an uni-directional TVS diode, Fast turn-on and Low ESD clamping voltage,Solid-state silicon-avalanche and active circuit triggering technology. The LTVS16H16T5G complies with the IEC 61000-4-2 (ESD) standard with ±30kV air and ±30kV contact discharge.The high ESD surge protection make 16H16T5G an ideal choice to Power Supply Protection,Notebooks and Handhelds,Touch Panels, Cellular Handsets and Accessories.

DFN1610

MARKING DIAGRAM

cathode

BT = Specific Device Code
M = Month Code

Features

- Protects one data or power line
- Low clamping voltage
- Complies with following standards:
  – IEC 61000-4-2 (ESD) immunity test
  Air discharge: ±30kV
  Contact discharge: ±30kV
- We declare that the material of product compliance with RoHS requirements and Halogen Free.

Ordering information

Device	Marking	Packing
LTVS16H16T5G	BT	DFN1610-2A

Applications

- Peripherals
- Touch Panels
- Power Line Protection
- Small Panel Modules
- Hand Held Portable Applications

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

Parameter	Symbol	Value	Unit
Peak Pulse Power (8/20μs)	Ppk	1740	W
Peak Pulse Current (8/20μs)	Ipp	60	A
ESD per IEC 61000−4−2 (Air) ESD per IEC 61000−4−2 (Contact)	V_{ESD}	±30 ±30	kV
Operating Temperature Range	T_J	−55 to +125	°C
Storage Temperature Range	Tstg	−55 to +150	°C

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

Parameter	Symbol	Min	Typ	Max	Unit	Test Condition
Reverse Working Voltage	V_{RWM}			16	V	
Breakdown Voltage	V_{BR}	17.6		20	V	I_R = 1mA
Reverse Leakage Current	I_R			0.5	μA	V_R= 16V
Clamping Voltage	V_C		20		V	I_{PP} = 10A (8 x 20μs pulse)
Clamping Voltage	V_C		28	29	V	I_{PP} = 60A (8 x 20μs pulse)
Junction Capacitance	C_J		390		pF	V_R = 0V, f = 1MHz

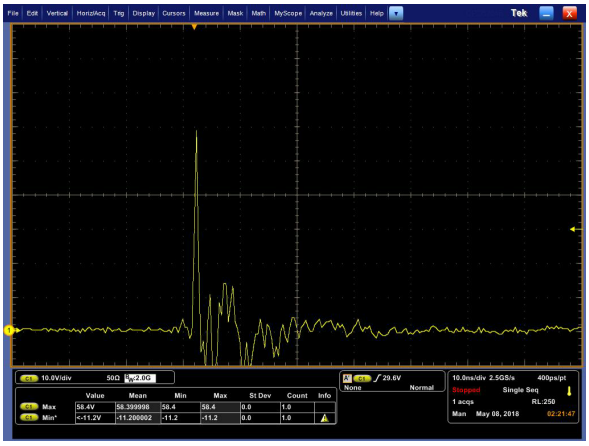

Figure 1. ESD Clamping Voltage Screenshot Positive 8 kV Contact per IEC61000–4–2

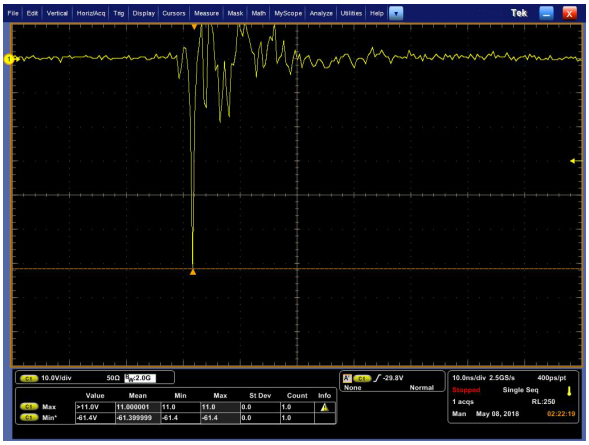

Figure 2. ESD Clamping Voltage Screenshot Negative 8 kV Contact per IEC61000–4–2

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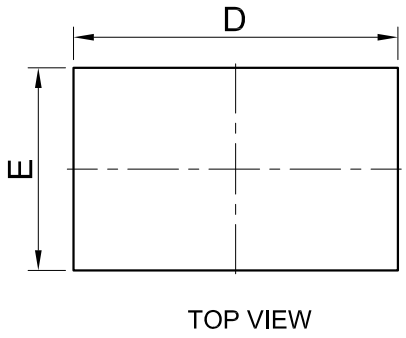
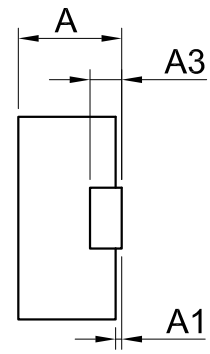
OUTLINE AND DIMENSIONS

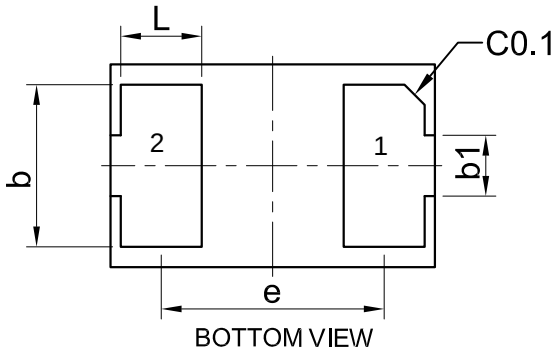


TOP VIEW



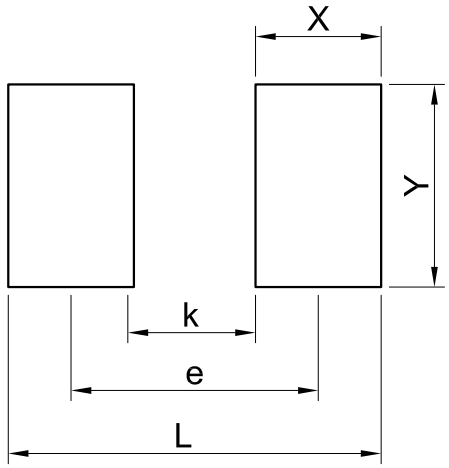
SIDE VIEW

DFN1610			
DIM	MIN	NOR	MAX
A	0.46	0.51	0.56
A1	0.01	0.03	0.05
b	0.75	0.80	0.85
b1	0.25	0.30	0.35
D	1.55	1.60	1.65
E	0.95	1.00	1.05
e	1.10BSC		
L	0.35	0.40	0.45
A3	0.127REF.		
All Dimensions in mm			



BOTTOM VIEW

SOLDERING FOOTPRINT



DFN1610	
DIM	(mm)
X	0.62
Y	1.00
L	1.84
e	1.22
K	0.60

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