

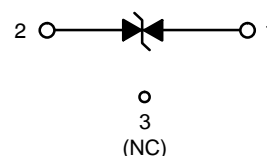
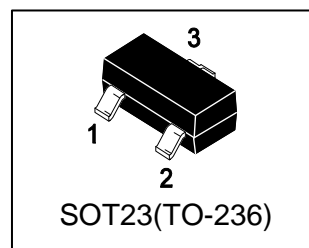
# LTVS23LH5.0CLT1G

## ESD PROTECTION DIODE

### LTVS23LH5.0CLT1G

#### General Description

The LTVS23LH5.0CLT1G is a Low Capacitance TVS for high speed line protections. The capacitance is lowered by integrating a compensating diode. It clamps the voltage just above the logic level supply for positive transients, and to a diode drop below ground negative transients. And offers ESD protection for high speed interfaces such as communication systems, computers, and computers peripherals.



#### Applications

- Computers
- Printers
- Communication systems

#### Features

- Low leakage current:  $I_{R\max} < 0.5 \mu A$  at VBR
- 300W peak pulse power (8/20  $\mu s$ )

#### Ordering Information

Device	Marking	Shipping
LTVS23LH5.0CLT1G	H5C	3000/Tape&Reel

#### Benefits

- High ESD protection level
- Suitable for high density boards.

#### Complies with the following standards

IEC61000-4-2 Level 4

#### Absolute Ratings ( $T_{amb}=25^{\circ}C$ )

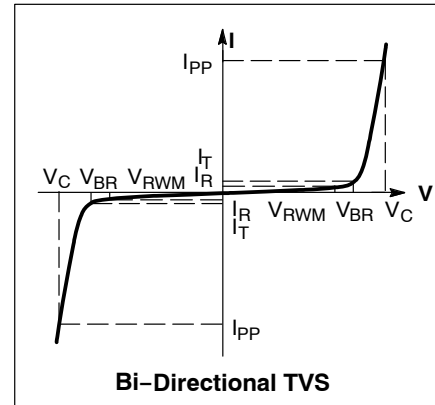
Symbol	Parameter	Value	Units
$P_{PP}$	Peak Pulse Power ( $t_p = 8/20\mu s$ )	300	W
$T_L$	Maximum lead temperature for soldering during 10s	260	$^{\circ}C$
$T_{stg}$	Storage Temperature Range	-55 to +150	$^{\circ}C$
$T_{op}$	Operating Temperature Range	-40 to +125	$^{\circ}C$
$T_j$	Maximum junction temperature	150	$^{\circ}C$
$V_{PP}$	IEC61000-4-2 air discharge	30	kv
	IEC61000-4-2 contact discharge	30	

# LTVS23LH5.0CLT1G

## ELECTRICAL CHARACTERISTICS

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

Symbol	Parameter
$I_{PP}$	Maximum Reverse Peak Pulse Current
$V_C$	Clamping Voltage @ $I_{PP}$
$V_{RWM}$	Working Peak Reverse Voltage
$I_R$	Maximum Reverse Leakage Current @ $V_{RWM}$
$V_{BR}$	Breakdown Voltage @ $I_T$
$I_T$	Test Current
$P_{pk}$	Peak Power Dissipation
C	Capacitance @ $V_R = 0$ and $f = 1.0$ MHz



## ELECTRICAL CHARACTERISTICS

Part Numbers	$V_{BR}$		$@I_R$	$V_{RWM}$	$I_{RM}$	$V_C$		IPP	C	
	Min.	Max.				@ 1 A	@ 5 A		Typ	Max
	v	v	mA	v	$\mu\text{A}$	v	v	A	pF	pF
LTVS23LH5.0CLT1G	6	8	1	5	0.5	9.8	11	17	4	5

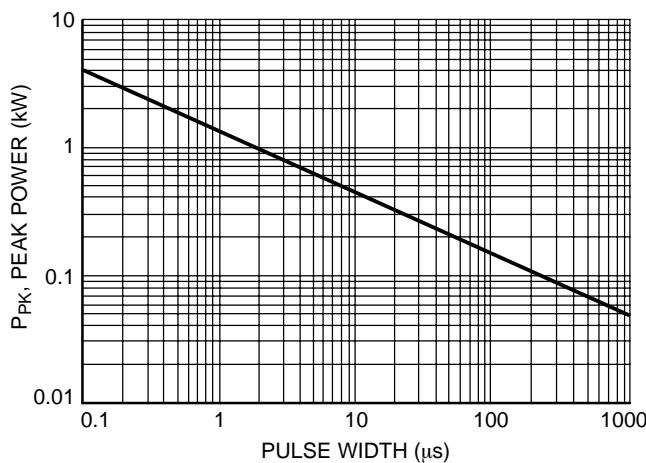


Figure 1. Maximum Peak Power Rating

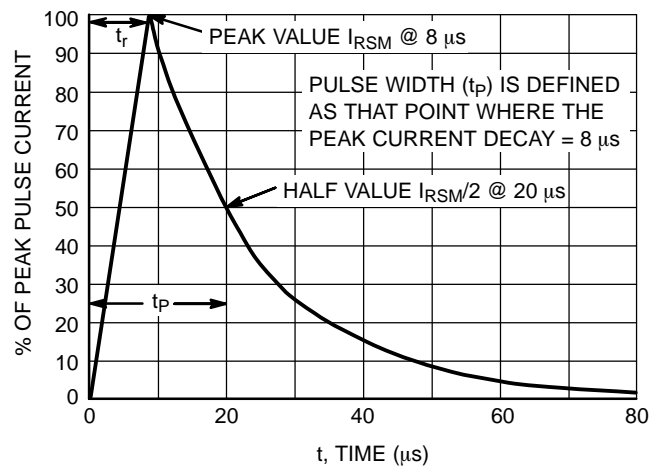
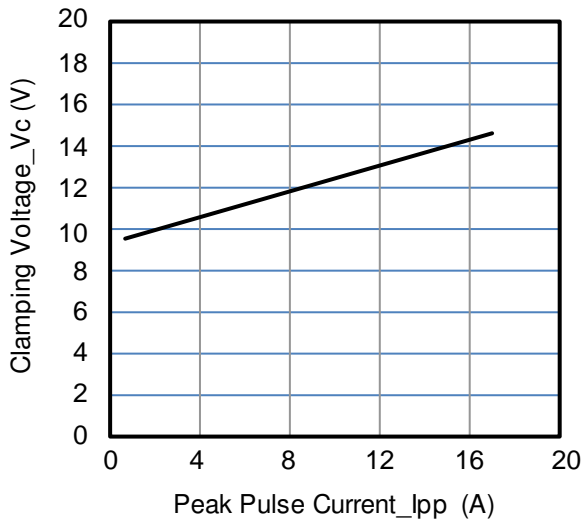
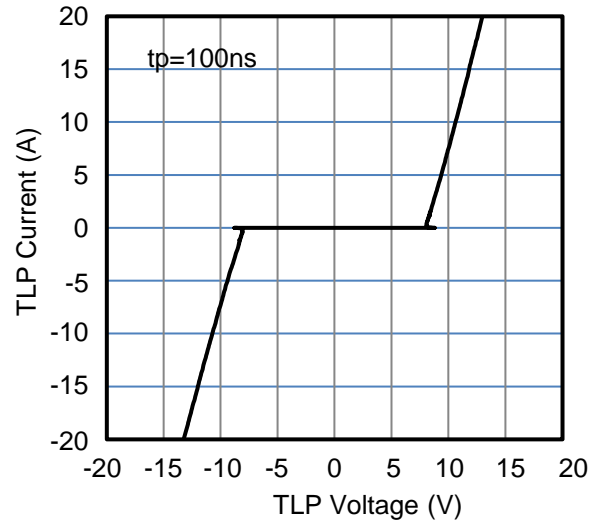
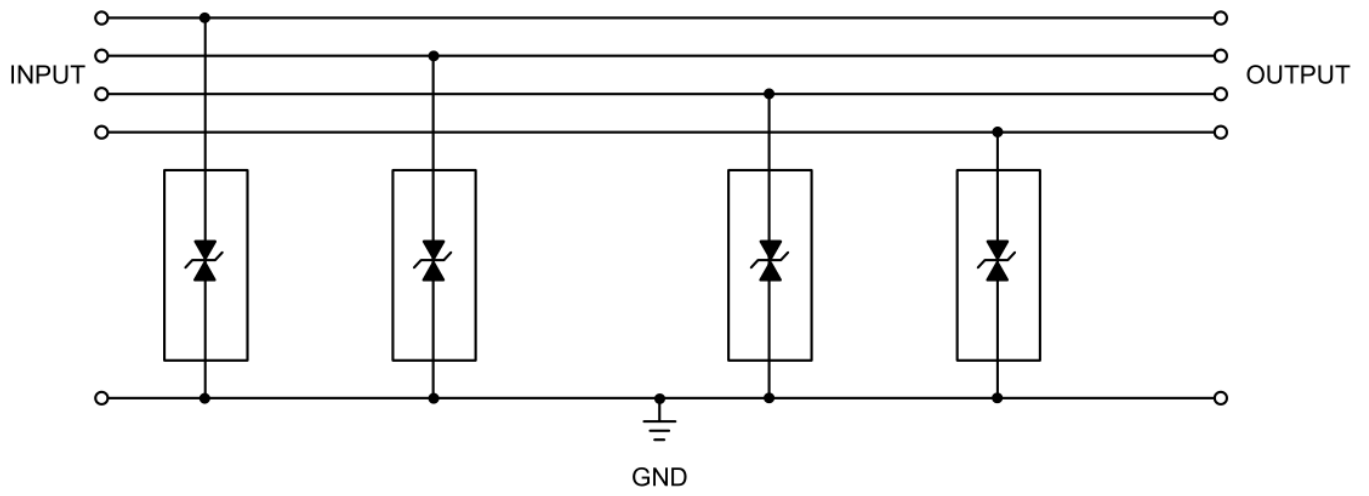


Figure 2. 8/20  $\mu\text{s}$  Pulse Waveform

**LTVS23LH5.0CLT1G****Fig 3. Clamping Voltage vs. Peak Pulse Current****Fig 4. TLP Measurement**

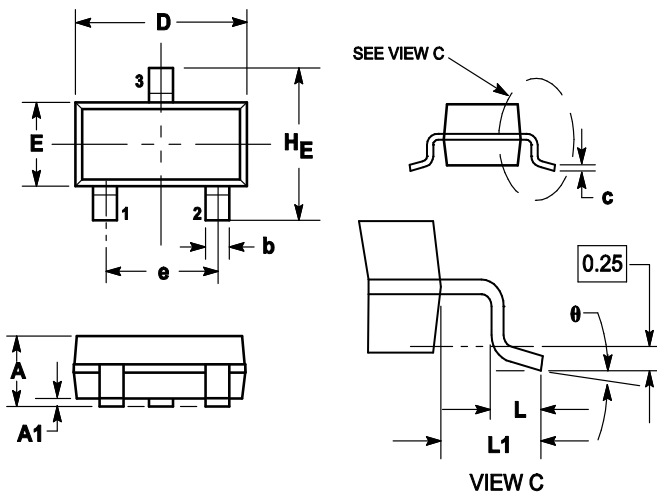
**LTVS23LH5.0CLT1G**

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## OUTLINE AND DIMENSIONS

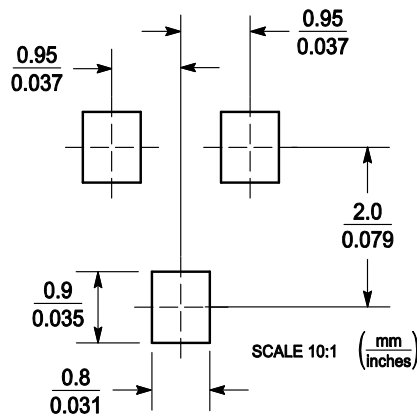
Notes:

1. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M, 1982.
2. CONTROLLING DIMENSION: MILLIMETERS.
3. MAXIMUM LEAD THICKNESS INCLUDES LEAD FINISH. MINIMUM LEAD THICKNESS IS THE MINIMUM THICKNESS OF BASE MATERIAL.
4. DIMENSIONS D AND E DO NOT INCLUDE MOLD FLASH, PROTRUSIONS OR GATE BURRS.



DIM	MILLIMETERS			INCHES		
	MIN	NOM	MAX	MIN	NOM	MAX
A	0.89	1	1.11	0.035	0.04	0.044
A1	0.01	0.06	0.1	0.001	0.002	0.004
b	0.37	0.44	0.5	0.015	0.018	0.02
c	0.09	0.13	0.18	0.003	0.005	0.007
D	2.80	2.9	3.04	0.11	0.114	0.12
E	1.20	1.3	1.4	0.047	0.051	0.055
e	1.78	1.9	2.04	0.07	0.075	0.081
L	0.10	0.2	0.3	0.004	0.008	0.012
L1	0.35	0.54	0.69	0.014	0.021	0.029
HE	2.10	2.4	2.64	0.083	0.094	0.104
theta	0°	---	10°	0°	---	10°

## SOLDERING FOOTPRINT



单击下面可查看定价，库存，交付和生命周期等信息

[>>LRC\(乐山无线电\)](#)