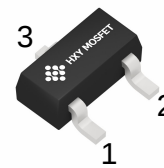




Discription

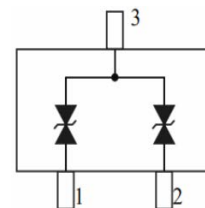
The S-LESD23H12CLT1G is a Transient Voltage Suppressor Arrays that designed to protect components which are connected to data and transmission lines against electrostatic discharge (ESD), electrical fast Transients (EFT), and lightning. All pins are rated to withstand 15 kV ESD pulses using the IEC61000-4-2 are discharge method.



SOT-23

Features

- ★ IEC 61000-4-2 Level 4 ESD Protection
 - $\pm 30\text{kV}$ Contact Discharge
 - $\pm 30\text{kV}$ Air Discharge
- ★ 180W Peak pulse Power (8/20us)
- ★ Low clamping voltage
- ★ Protects two bidirectional or two Unidirectional lines
- ★ Low leakage current
- ★ RoHS compliant



Circuit Diagram

Applications

- ★ Portable electronic
- ★ Control & monitoring systems
- ★ Servers, notebooks, and desktop PCs
- ★ Set-top box
- ★ Communications systems
- ★ Cellular handsets and accessories

Ordering Information

Product ID	Pack	Qty(PCS)
S-LESD23H12CLT1G	SOT-23	3000

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

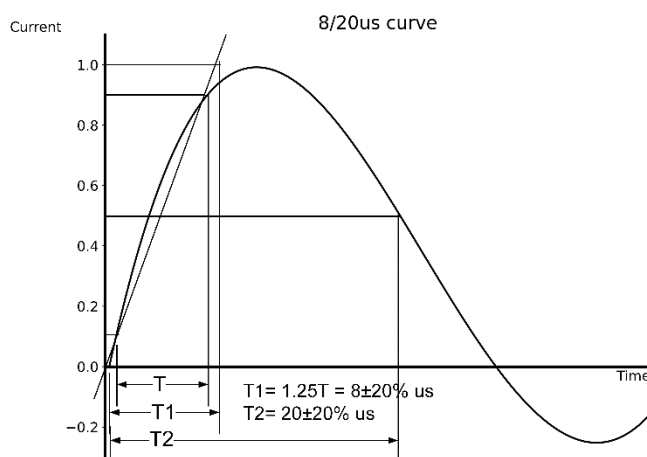
Symbol	Parameter	Value	Units
P_{PP}	Peak Pulse Power ($t_p = 8/20 \mu s$)	180	W
T_L	Maximum lead temperature for soldering during 10s	260	$^{\circ}\text{C}$
T_{stg}	Storage Temperature Range	-55 to +155	$^{\circ}\text{C}$
T_{op}	Operating Temperature Range	-55 to +150	$^{\circ}\text{C}$
T_j	Maximum junction temperature	150	$^{\circ}\text{C}$
	IEC61000-4-2 (ESD)	air discharge contact discharge	± 30 ± 30 KV



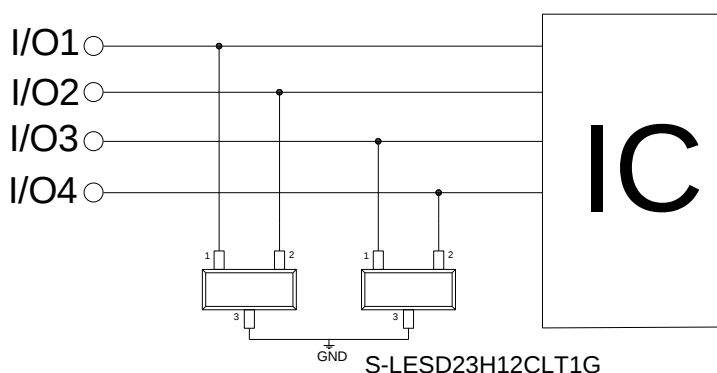
Electrical Characteristics

Symbol	Parameter	Test Condition	Min	Typ	Max	Units
V_{RWM}	Reverse Working Voltage				12	V
V_{BR}	Reverse Breakdown Voltage	$I_T = 1mA$	15.8			V
I_R	Reverse Leakage Current	$V_{RWM} = 12V$			0.5	μA
V_C	Clamping Voltage	$I_{PP} = 1A, t_p = 8/20\mu s$		16		V
		$I_{PP} = 11A, t_p = 8/20\mu s$		20		V
C_J	Junction Capacitance	$V_R = 0V, f = 1MHz$		8		pF

Typical Characteristics

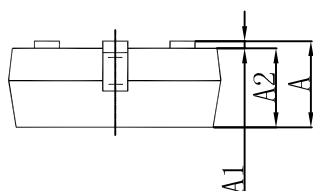
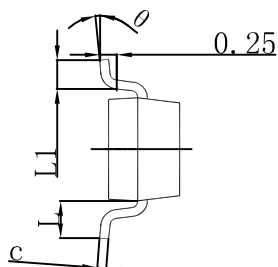
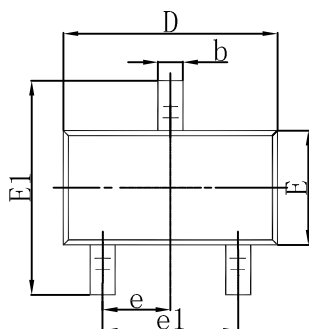


Typical Application



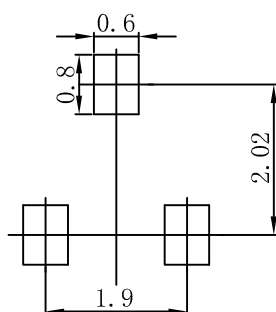


SOT-23 Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.900	1.150	0.035	0.045
A1	0.000	0.100	0.000	0.004
A2	0.900	1.050	0.035	0.041
b	0.300	0.500	0.012	0.020
c	0.080	0.150	0.003	0.006
D	2.800	3.000	0.110	0.118
E	1.200	1.400	0.047	0.055
E1	2.250	2.550	0.089	0.100
e	0.950 TYP		0.037 TYP	
e1	1.800	2.000	0.071	0.079
L	0.550 REF		0.022 REF	
L1	0.300	0.500	0.012	0.020
θ	0°	8°	0°	8°

SOT-23 Suggested Pad Layout



Note:

1. Controlling dimension: in millimeters.
2. General tolerance: $\pm 0.05\text{mm}$.
3. The pad layout is for reference purposes only.



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