



Discription

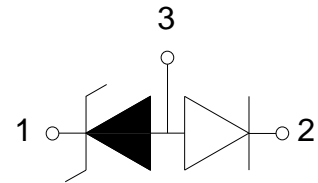
The HGL05T-HG3-18 is an ultra-low capacitance TVS (Transient Voltage Suppressor) array designed to protect high speed data interfaces. It has been specifically designed to protect sensitive electronic components which are connected to data and transmission lines from over-stress caused by ESD(Electrostatic Discharge).



SOT-23

Features

- ★ Transient protection for high-speed data lines
IEC 61000-4-2(ESD) $\pm 10\text{kV}$ (Contact)
 $\pm 15\text{kV}$ (Air)
IEC 61000-4-4(EFT) 40A (5/50 ns)
- ★ Peak power dissipation: 300W (8/20us)
- ★ Working voltages : 5V
- ★ Protecting one unidirectional lines
- ★ Low clamping voltage
- ★ Low leakage current



Ordering information

Product ID	Pack	Qty(PCS)
HGL05T-HG3-18	SOT-23	3000

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

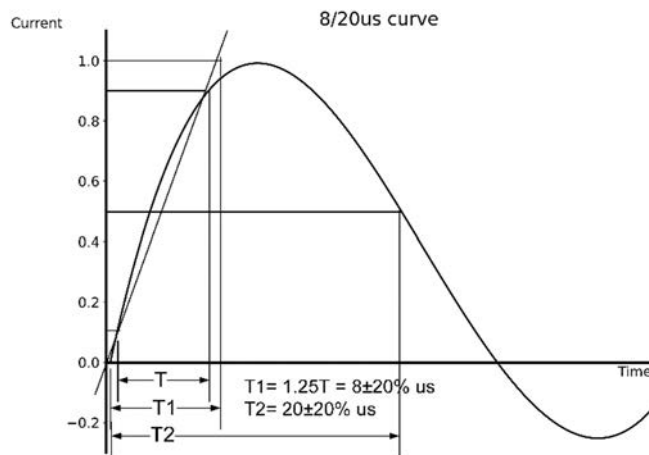
Symbol	Parameter	Value	Units	
P_{PP}	Peak Pulse Power ($t_p = 8/20 \mu s$)	300	W	
T_L	Maximum lead temperature for soldering during 10s	260	$^{\circ}\text{C}$	
T_{stg}	Storage Temperature Range	-55 to +155	$^{\circ}\text{C}$	
T_{op}	Operating Temperature Range	-40 to +125	$^{\circ}\text{C}$	
T_j	Maximum junction temperature	150	$^{\circ}\text{C}$	
	IEC61000-4-2 (ESD)	air discharge contact discharge	± 15 ± 10	KV
	IEC61000-4-4 (EFT)	40	A	



Electrical Characteristics

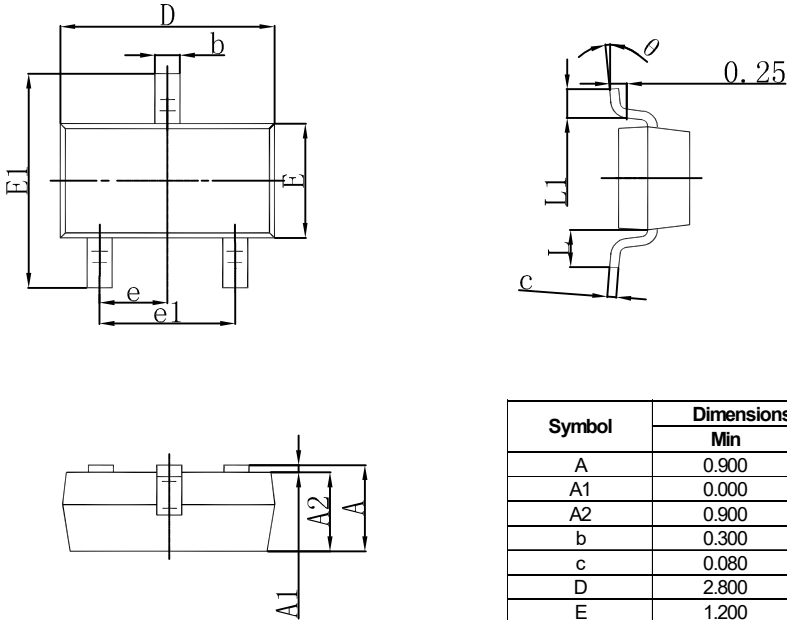
Symbol	Parameter	Test Condition	Min	Typ	Max	Units
V_{RWM}	Reverse Working Voltage				5	V
V_{BR}	Reverse Breakdown Voltage	$I_T = 1mA$	6			V
I_R	Reverse Leakage Current	$V_{RWM} = 5V$			1	μA
V_C	Clamping Voltage	$I_{RWM} = 1A, t_p = 8/20\mu s$		9.5		V
		$I_{RWM} = 15A, t_p = 8/20\mu s$		12		V
C_J	Junction Capacitance	$V_R = 0V, f = 1MHz$		1.5		pF

Typical Characteristics





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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