

## **Discription**

The GL05T-HE3-18 is an ultra-low capacitance TVS (Transient Voltage Suppressor) array designed to protect high speed data interfaces. It has been specifically desianed to protect ensitive electronic components which are connected to data and transmission lines from over-stress caused by ESD(Electrostatic Discharge).



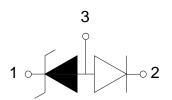
SOT-23

## **Features**

★ Transient protection for high-speed data lines IEC 61000-4-2(ESD) ±10kV (Contact) ±15kV (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



## **Orderingin formation**

Product ID	Pack	Qty(PCS)
GL05T-HE3-18	SOT-23	3000

### Absolute Ratings(Tamb = 25°C)

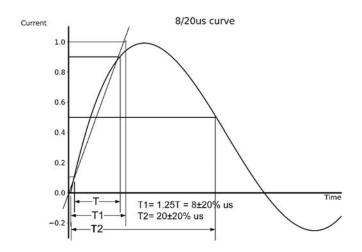
Symbol	Parameter	Value	Units
P <sub>PP</sub>	Peak Pulse Power (t <sub>p</sub> = 8/20 μ s)	300	W
TL	Maximum lead temperature for soldering during 10s	260	°C
T <sub>stg</sub>	Storage Temperature Range	-55 to +155	°C
T <sub>op</sub>	Operating Temperature Range	-40 to +125	°C
T <sub>j</sub>	Maximum junction temperature	150	°C
	IEC61000-4-2 (ESD) air discharge contact discharge	±15 ±10	KV
	IEC61000-4-4 (EFT)	40	Α



### **Electrical Characteristics**

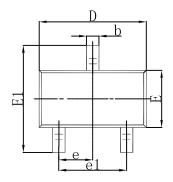
Symbol	Parameter	Test Condition	Min	Тур	Max	Units
$V_{RWM}$	Reverse Working Voltage				5	V
V <sub>BR</sub>	Reverse Breakdown Voltage	Iτ = 1mA	6			V
<b>I</b> R	Reverse Leakage Current	V <sub>RWM</sub> = 5V			1	μA
Vc	Clamping Voltage	$I_{RWM} = 1A, t_P = 8/20 \mu s$		9.5		V
		$I_{RWM} = 15A, t_p = 8/20 \mu s$		12		V
C	Junction Capacitance	V <sub>R</sub> = 0V, f = 1MHz		1.5		pF

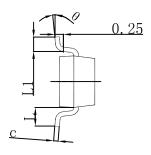
# **Typical Characteristics**

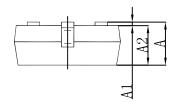




# **SOT-23 Package Outline Dimensions**

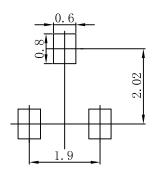






Cumbal	Dimensions In Millimeters		Dimensions In Inches		
Symbol	Min	Max	Min	Max	
Α	0.900	1.150	0.035	0.045	
A1	0.000	0.100	0.000	0.004	
A2	0.900	1.050	0.035	0.041	
b	0.300	0.500	0.012	0.020	
С	0.080	0.150	0.003	0.006	
D	2.800	3.000	0.110	0.118	
Е	1.200	1.400	0.047	0.055	
E1	2.250	2.550	0.089	0.100	
е	0.950	) TYP 0.037 TYP		7 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:± 0.05mm.
  3.The pad layout is for reference purposes only.



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