

The LGSOT05CLT1G is a dual monolithic voltage suppressor designed to protect components which are connected to data and transmission lines against ESD. It clamps the voltage just above the logic level supply for positive transients, and to a diode drop below ground for negative transients. It can also work as bidirectional suppressor by connecting only pin1 and 2.

FEATURES

- 2 Unidirectional Transil functions
- Low leakage current: $I_R \max < 20 \mu A$ at V_{RM}
- 300W peak pulse power(8/20 μs)
- Transient protection for data lines as per IEC61000-4-2(ESD) 15kV(air) 8kV(contact) IEC61000-4-5(Lightning) see IPPM below
- We declare that the material of product compliant with RoHS requirements and Halogen Free.

APPLICATIONS

- Computers、Printers
- Communication systems

ABSOLUTE RATINGS(Ta = 25°C)

Parameter	Symbol	Limits	Unit
IEC 61000-4-2 (ESD)	Contact	± 8	kV
	Air	± 15	
Peak Pulse Power (tp = 8/20 μs)	PPP	300	W
	TJ	150	°C
Storage temperature	Tstg	-55 ~ +150	°C
Operating Temperature Range	TOP	-40 ~ +125	°C
(10 Second Duration)	TL	260	°C

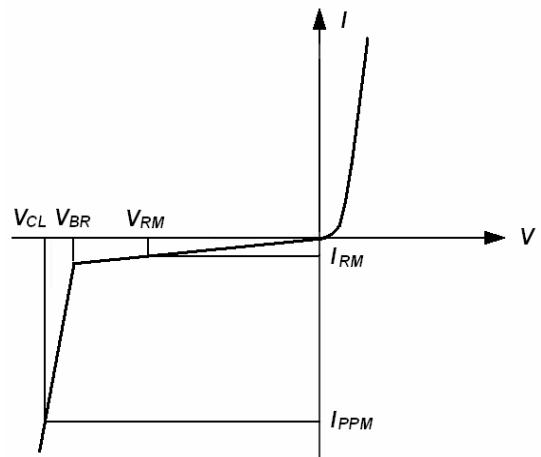
ELECTRICAL CHARACTERISTICS (Ta= 25°C)

Device	V_{RWM} (V)	I_R (u A) @ V_{RWM}	V_{BR} (V) @ I_T (Note 1)	I_T	V_C (V) @ $I_{pp} = 1 A$	V_C (V) @ $I_{pp} = 5A$	$I_{PP}(A)$ @ $t_p=8/20\mu s$	C (pF)
	Max	Max	Min	mA	Max	Max	Max	Max
LGSOT05CLT1G	5	5	6	1	9.8	12.5	17	220

1. V_{BR} is measured with a pluse test current I_T at an ambient temperature of 25°C.

Electrical Parameter

Symbol	Parameter
V_{RM}	Stand-off voltage
V_{BR}	Breakdown voltage
V_{CL}	Clamping voltage
I_{RM}	Leakage current
I_{PPM}	Peak pulse current



ELRCTIRCAL CHARACTERISTICS CURVES

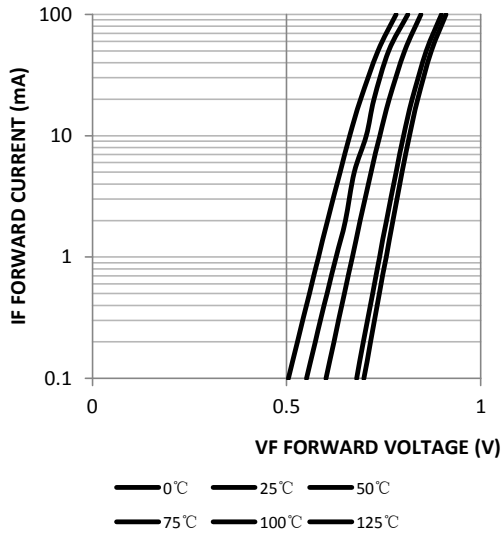


Fig 1. Forward character

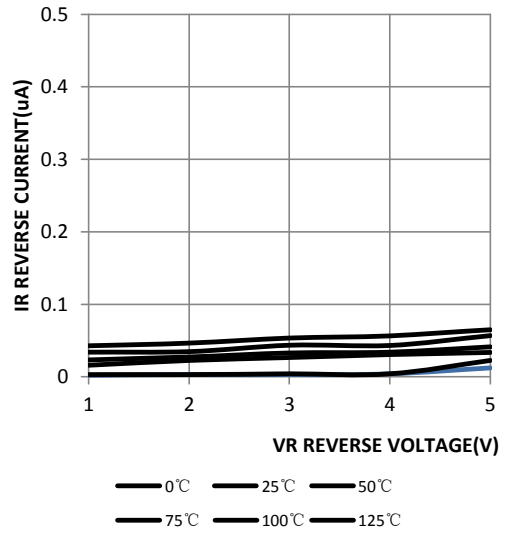


Fig 2. Reverse character

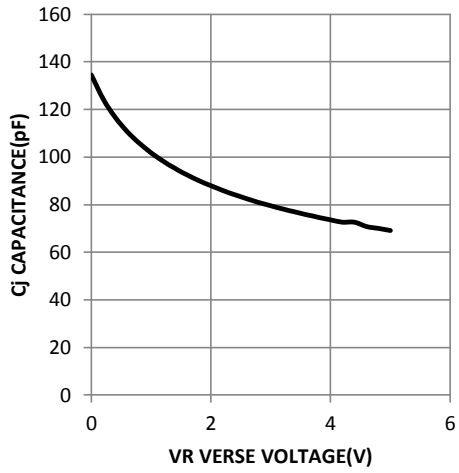
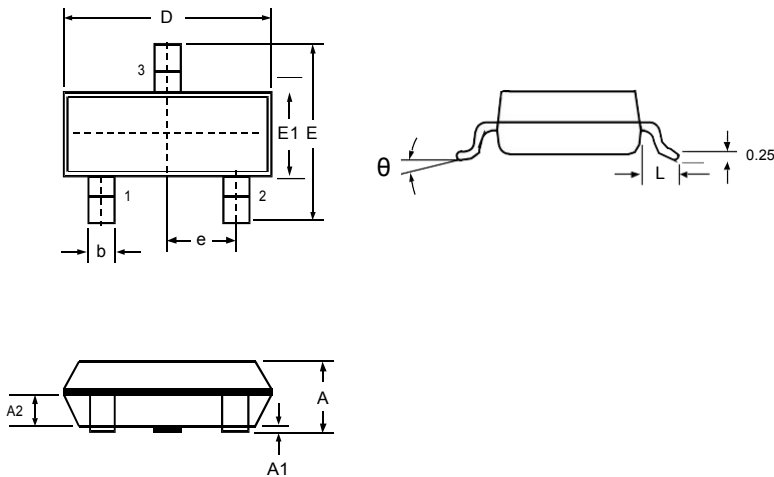


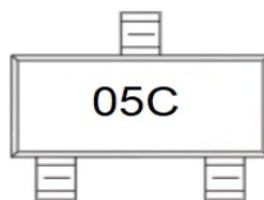
Fig 3. Capacitance character

Outline Drawing – SOT-23



SYMBOL	DIMENSIONS			
	MILLIMETER		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
D	2.800	3.000	0.110	0.118
b	0.300	0.500	0.012	0.020
E	2.250	2.550	0.089	0.100
E1	1.200	1.400	0.047	0.055
e	0.950 BSC		0.037 BSC	
L	0.500	0.675	0.020	0.027
theta	0	8°	0	8°

Marking



Ordering information

Order code	Package	Baseqty	Delivery mode
UMW LGSOT05CLT1G	SOT-23	3000	Tape and reel