















**ESD** 

TVS

MOS

LDO

Diode

Sensor

DC-DC

# **Product Specification**

Domestic Part Number	LGSOT05CLT1G
Overseas Part Number	LGSOT05CLT1G
▶ Equivalent Part Number	LGSOT05CLT1G





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: IR max< 20 μA at VRM</li>
- 300W peak pulse power(8/20µs)
- 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 =  $25^{\circ}$ C)

RB002012 RATINOS(14 = 20 0)					
Parameter	Symbol	Limits	Unit		
IEC 61000-4-2 (ESD) Conta	ct	±8	kV		
ļ.	Air	±15	ΚV		
Peak Pulse Power (tp = 8/20us)	Ppp	300	W		
	TJ	150	$^{\circ}$ C		
Storage temperature	Tstg	<b>-</b> 55∼+150	${\mathbb C}$		
Operating Temperature Range	Тор	<b>-</b> 40∼+125	$^{\circ}$		
	TL	260	$^{\circ}$ C		
(10 Second Duration)					

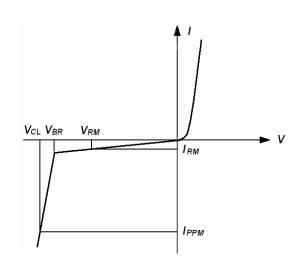
#### **ELECTRICAL CHARACTERISTICS (Ta= 25℃)**

			VBR (V)					
	VRWM	Ir (u A)	@ IT		Vc (V)	Vc (V)	IPP(A)	
	(V)	@VRWM	(Note 1)	ΙΤ	@Ipp = 1 A	@Ipp = 5A	@tp=8/20µs	C (pF)
Device	Max	Max	Min	mΑ	Max	Max	Max	Max
LGSOT05CLT1G	5	5	6	1	9.8	12.5	17	220

<sup>1.</sup> VBR is measured with a pluse test current IT at an ambient temperature of 25  $^{\circ}$ C.

#### **Electrical Parameter**

Symbol	Parameter	
$V_{RM}$	Stand-off voltage	
$V_{BR}$	Breakdown voltage	
$V_{CL}$	Clamping voltage	
I <sub>RM</sub>	Leakage current	
I <sub>PPM</sub>	Peak pulse current	





### **ELRCTIRCAL CHARACTERISTICS CURVES**

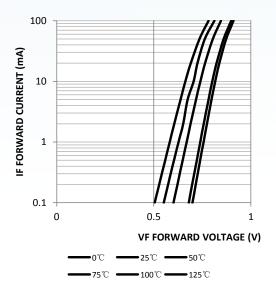


Fig 1. Forward character

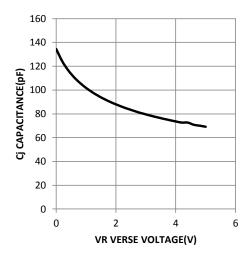


Fig 3. Capacitance character

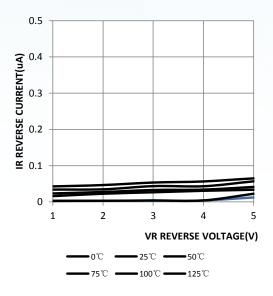
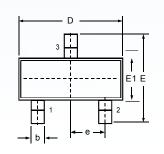
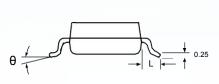


Fig 2. Reverese character



## **Outline Drawing - SOT-23**

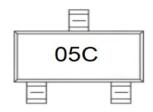






DIMENSIONS					
SYMBOL	MILLIMETER		INCHES		
OTMIDGE	MIN	MAX	MIN	MAX	
Α	0.900	1.150	0.035	0.045	
A1	0.000	0.100	0.000	0.004	
A2	0.900	1.050	0.035	0.041	
D	2.800	3.000	0.110	0.118	
b	0.300	0.500	0.012	0.020	
E	2.250	2.550	0.089	0.100	
E1	1.200	1.400	0.047	0.055	
е	0.950 BSC		0.037	BSC	
L	0.500	0.675	0.020	0.027	
θ	0	8°	0	8°	

## Marking



## Ordering information

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



## Disclaimer

EVVOSEMI ("EVVO") reserves the right to make corrections, enhancements, improvements, and other changes to its products and services at any time, and to discontinue any product or service without notice.

EVVO warrants the performance of its hardware products to the specifications applicable at the time of sale in accordance with its standard warranty. Testing and other quality control techniques are used as deemed necessary by EVVO to support this warranty. Except where mandated by government requirements, testing of all parameters of each product is not necessarily performed.

Customers should obtain and confirm the latest product information and specifications before final design, purchase, or use. EVVO makes no warranty, representation, or guarantee regarding the suitability of its products for any particular purpose, nor does EVVO assume any liability for application assistance or customer product design. EVVO does not warrant or accept any liability for products that are purchased or used for any unintended or unauthorized application.

EVVO products are not authorized for use as critical components in life support devices or systems without the express written approval of EVVOSEMI.

The EVVO logo and EVVOSEMI are trademarks of EVVOSEMI or its subsidiaries in relevant jurisdictions. EVVO reserves the right to make changes without further notice to any products herein.