

S-LGSOT05CLT1G

Dual Transient Voltage Suppressors
Array for ESD Protection

1. FEATURES

- We declare that the material of product compliance with RoHS requirements and Halogen Free.
- S- prefix for automotive and other applications requiring unique site and control change requirements; AEC-Q101 qualified and PPAP capable.
- 2 Unidirectional transil functions
- Low leakage current: $I_R \max < 20 \mu A$ at VRM
- 300W peak pulse power(8/20 μs)
- Transient protection for data lines as per IEC61000-4-2(ESD) $\pm 30KV$ (air) $\pm 30KV$ (contact)
IEC61000-4-5 (Lightning) 17 A (8/20 μs)

2. APPLICATIONS

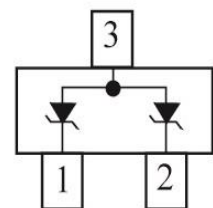
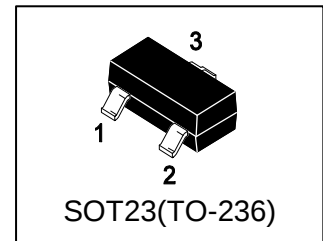
- Computers
- Printers
- Communication systems

3. DEVICE MARKING AND ORDERING INFORMATION

Device	Marking	Shipping
S-LGSOT05CLT1G	05C	3000/Tape&Reel
S-LGSOT05CLT3G	05C	10000/Tape&Reel

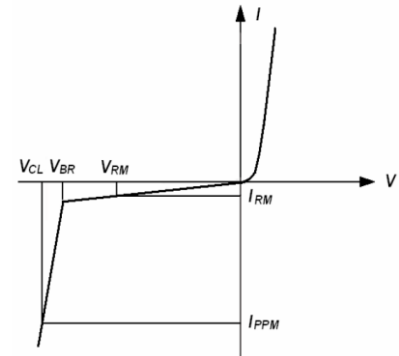
4. ABSOLUTE RATINGS($T_a = 25^\circ C$)

Parameter	Symbol	Limits	Unit
Peak Pulse Power ($t_p = 8/20\mu s$)	PPP	300	W
Lead Solder Temperature – Maximum (10 Second Duration)	TL	260	$^\circ C$
Storage Temperature Range	Tstg	$-55 \sim +150$	$^\circ C$
Operating Temperature Range	Top	$-40 \sim +125$	$^\circ C$
Maximum junction temperature	Tj	150	$^\circ C$
Electrostatic discharge	ESD		kV
IEC61000-4-2 air discharge		± 30	
IEC61000-4-2 contact discharge		± 30	



5. ELECTRICAL CHARACTERISTICS (Ta= 25°C)

Symbol	Parameter
VRM	Stand-off voltage
VBR	Breakdown voltage
VCL	Clamping voltage
IRM	Leakage current
IPPM	Peak pulse current



6. ELECTRICAL CHARACTERISTICS (Ta= 25°C)

DEVICE	VRWM (V)	IR (μA) @VRWM	VBR (V) @IT (Note 1)	IT (mA)	VC (V) @IPP=1A	VC (V) @IPP=5A	IPP(A) @tp=8/20μs	C (pF) f=1MHz
	Max.	Max.	Min.		Max.	Max.	Max.	Max.
S-LGSOT05CLT1G	5	5	6	1	9.8	12.5	17	220

1. 8/20 waveform used.

7. ELECTRICAL CHARACTERISTICS CURVES

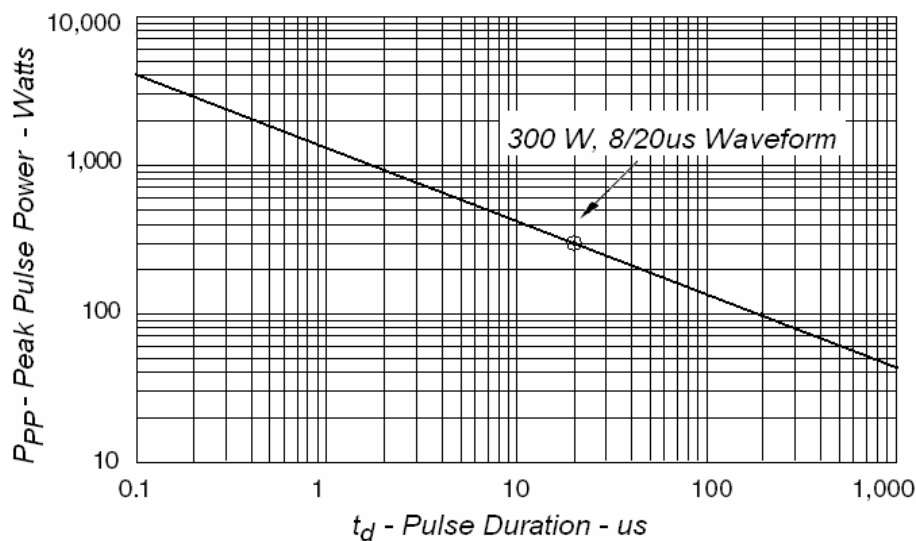


Fig1. Peak Pulse Power VS Pulse Time

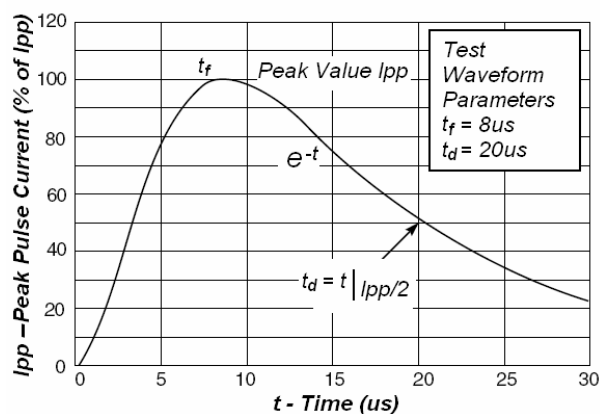


Fig2. Pulse Waveform

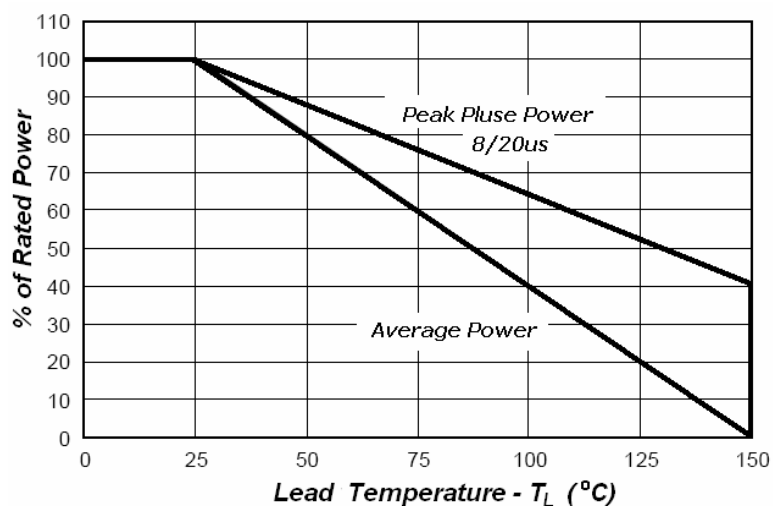
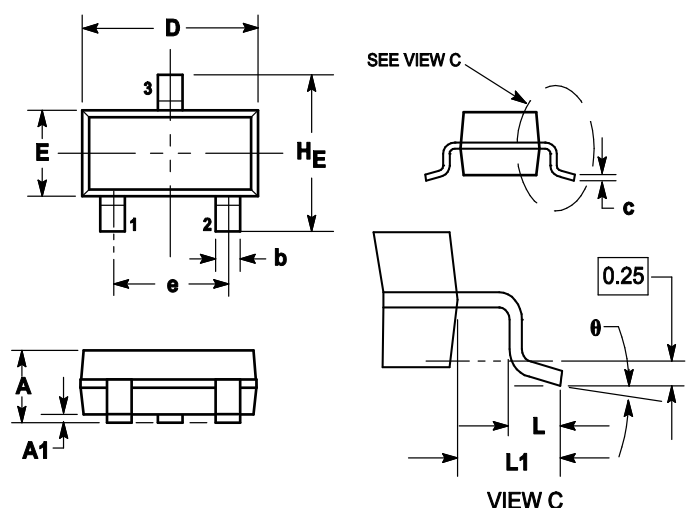


Fig3. Power Derating

8.OUTLINE AND DIMENSIONS

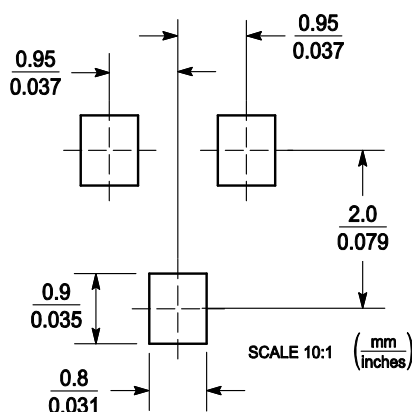
Notes:

1. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M, 1982.
2. CONTROLLING DIMENSION: MILLIMETERS.
3. MAXIMUM LEAD THICKNESS INCLUDES LEAD FINISH. MINIMUM LEAD THICKNESS IS THE MINIMUM THICKNESS OF BASE MATERIAL.
4. DIMENSIONS D AND E DO NOT INCLUDE MOLD FLASH, PROTRUSIONS OR GATE BURRS.



DIM	MILLIMETERS			INCHES		
	MIN	NOM	MAX	MIN	NOM	MAX
A	0.89	1	1.11	0.035	0.04	0.044
A1	0.01	0.06	0.1	0.001	0.002	0.004
b	0.37	0.44	0.5	0.015	0.018	0.02
c	0.09	0.13	0.18	0.003	0.005	0.007
D	2.80	2.9	3.04	0.11	0.114	0.12
E	1.20	1.3	1.4	0.047	0.051	0.055
e	1.78	1.9	2.04	0.07	0.075	0.081
L	0.10	0.2	0.3	0.004	0.008	0.012
L1	0.35	0.54	0.69	0.014	0.021	0.029
H _E	2.10	2.4	2.64	0.083	0.094	0.104
θ	0°	---	10°	0°	---	10°

9.SOLDERING FOOTPRINT



DISCLAIMER

- Curve guarantee in the specification. The curve of test items with electric parameter is used as quality guarantee. The curve of test items without electric parameter is used as reference only.
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