

EL05 Series

Transient Voltage Suppressors for ESD Protection

Description

The EL05 Series is a transient 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.

Features

- ESD protection >40 kilovolts
- Low clamping voltage
- 500W peak pulse power(8/20 μ s)
- Ultralow capacitance: 5pF
- RoHS compliant package

Complies with the following standards IEC61000-4-2

Level 4

15 kV (air discharge); 8 kV(contact discharge)

MIL STD 883E - Method 3015-7

Class 3 25 kV HBM (Human Body Model)

Mechanical Data

- Molded JEDEC SOT-23 Package
- Lead-Free Pure-Tin Plating (Annealed)
- Solder Reflow Temperature: Pure-Tin - Sn, 100:

260-270°C

Applications:

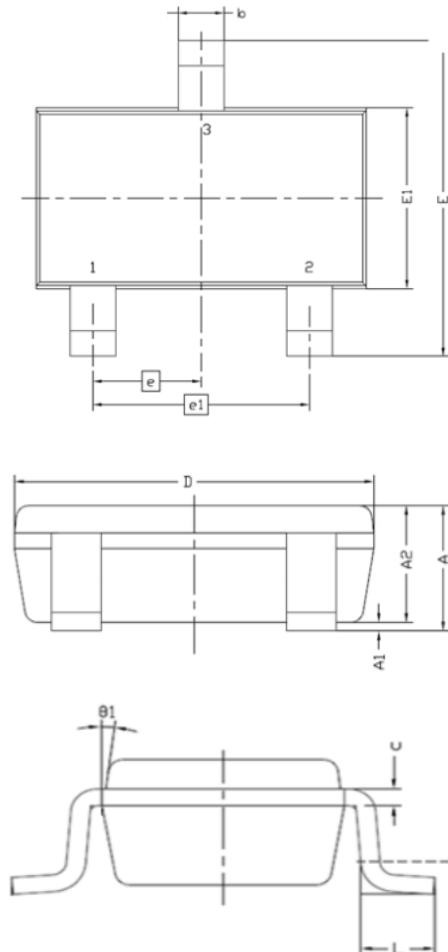
- Ethernet – 10/100 base T
- Cellular Phones
- FireWire
- Audio/Video inputs
- Portable Electronics

Packing & Order Information

3,000/Reel

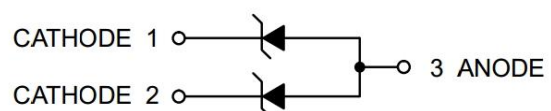


RoHS
COMPLIANT



Symbol	MILLIMETERS	
	MIN	MAX
A	0.8	1.2
A1	0	0.1
A2	0.7	1.1
b	0.3	0.5
c	0.1	0.2
D	2.7	3.1
E	2.6	3
E1	1.4	1.8
e	0.95 BSC	
e1	1.9 BSC	
L	0.3	0.6
$\theta 1$	7° NOM	

Graphic symbol



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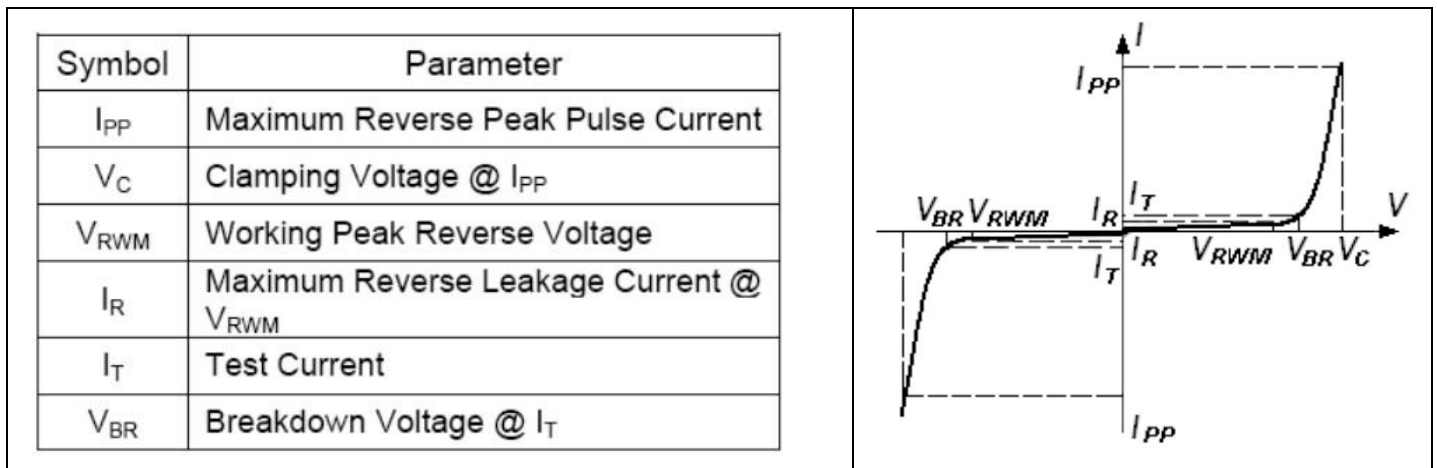
MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Absolute ratings (limiting value)

Symbol	Parameter	Value	Unit
Ppk	Peak Pulse Power (tp = 8/20µs)	300	W
TJ	Operating Temperature	-55 to +125	°C
TSTG	Storage Temperature	-55 to +150	°C
TL	Lead Solder Temperature – Maximum (10 Second Duration)	260	°C

Electrical Characteristics

Part Numbers	VBR			IT	VRWM	IR	Cj
	Min.	Typ.	Max.				
	V	V	V				PF
EL05	6.0	7.0	8.0	1	5	20	5



Typical Device Characteristics

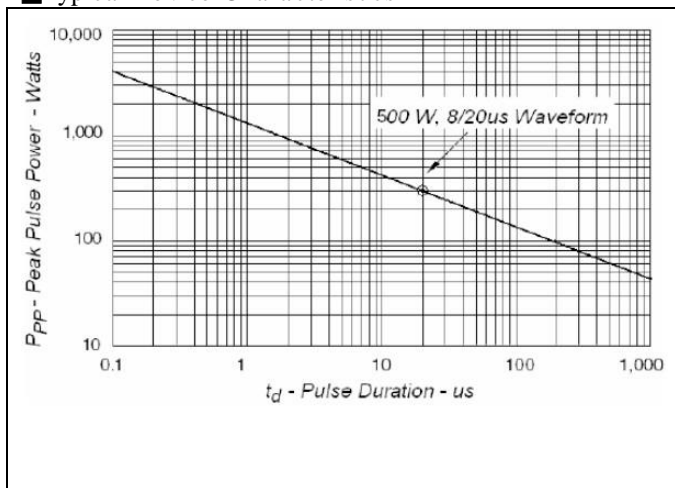


FIG.1-NON-REPETITIVE PEAK PULSE POWER VS. TIME

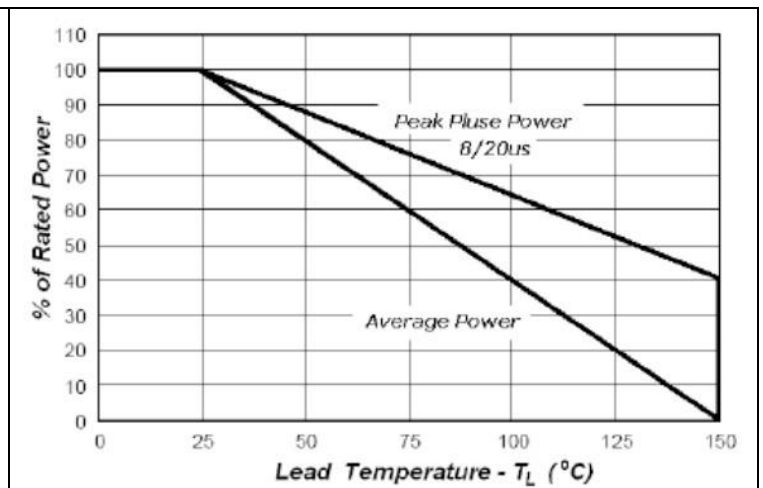


FIG.2-POWER DERATING CURVE

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