

Dual Transient Voltage Suppressors Array for ESD Protection

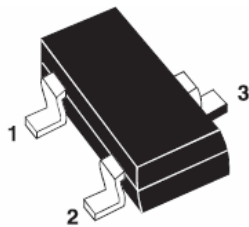
General Description

The SESOTA03C 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.

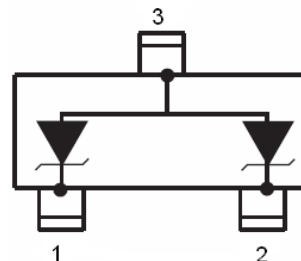
Applications

- Computers
- Printers
- Communication systems

Functional diagram



SOT-23



Features

- 2 Unidirectional Transil functions
- Low leakage current: $I_R \max < 20 \mu A$ at V_{RM}
- 150W peak pulse power(8/20 μs)
- Transient protection for data lines as per
- **Pb-Free package is available**
RoHS product for packing code suffix "G"
Halogen free product for packing code suffix "H"

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)

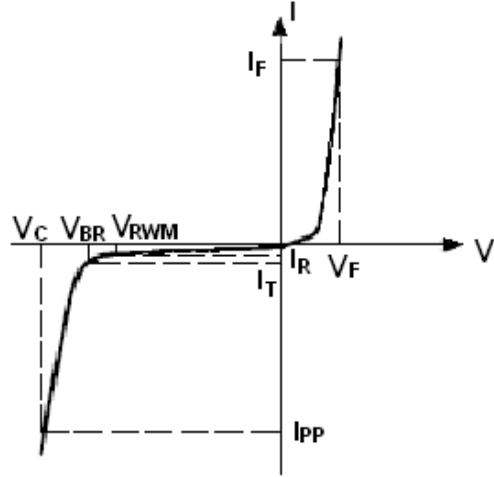
Absolute Ratings ($T_{amb}=25^{\circ}C$)			
Symbol	Parameter	Value	Units
P_{PP}	Peak Pulse Power ($t_p = 8/20\mu s$)	150	W
T_L	Maximum lead temperature for soldering during 10s	260	$^{\circ}C$
T_{stg}	Storage Temperature Range	-55 to +155	$^{\circ}C$
T_{op}	Operating Temperature Range	-40 to +125	$^{\circ}C$
T_j	Maximum junction temperature	150	$^{\circ}C$
V_{PP}	Electrostatic discharge		
	IEC61000-4-2 air discharge	15	kV
	IEC61000-4-2 contact discharge	8	



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Electrical Parameter

Symbol	Parameter
I_{PP}	Maximum Reverse Peak Pulse Current
V_C	Clamping Voltage @ I_{PP}
V_{RWM}	Working Peak Reverse Voltage
I_R	Maximum Reverse Leakage Current @ V_{RWM}
I_T	Test Current
V_{BR}	Breakdown Voltage @ I_T



Electrical Characteristics

Part Numbers	V_{BR}			I_T	V_{RWM}	I_R	C
	Min.	Typ.	Max.				Typ. 0v bias
	V	V	V				pF
SESOTA03C	5.2	5.6	6.0	5	3.3	1	200

1).8/20 waveform used. (see fig2.)

Typical Characteristics

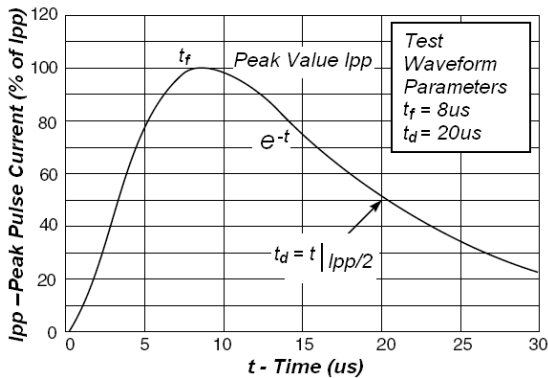


Fig2. Pulse Waveform

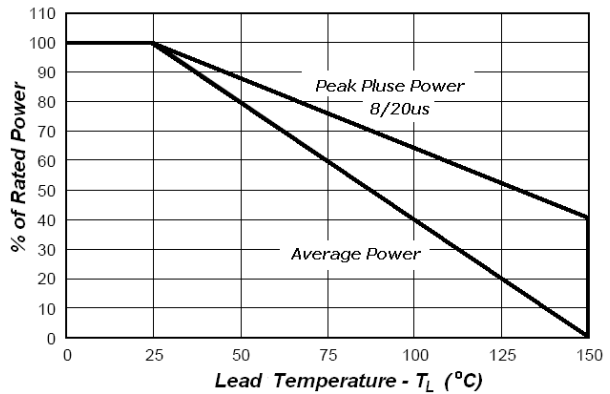


Fig3. Power Derating Curve



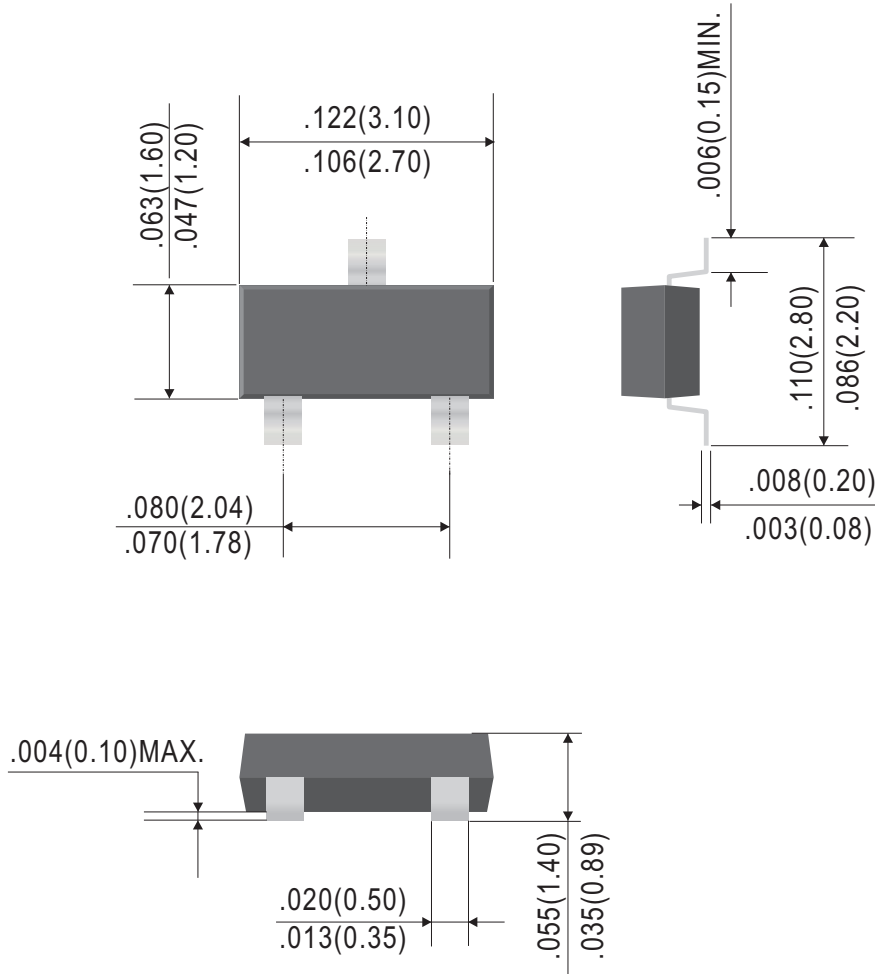
WILLAS



SESOTA03C

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SOT-23 mechanical data



Dimensions in inches and (millimeters)

Marking

Type number	Marking code
SESOTA03C	A3