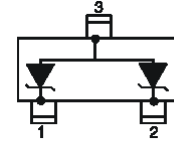


## Description

The SES5VT323-3 is Transient Voltage Suppressor Arrays that designed to protect components which are connected to data and transmission lines against electrostatic discharge(ESD), electrical fast transients(EFT), and lightning.

All pins are rated to withstand 20kv ESD pulses using the IEC 61000-4-2 contact discharge method, which can meet the requirement of Level 4, "Human Body Model" for air and contact discharge.



## Feature

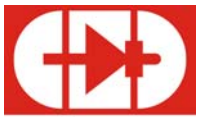
- 300 Watts peak pulse power ( $t_p=8/20\mu s$ )
- Low clamping voltage
- Protects one bidirectional or two unidirectional lines
- Working voltages: 5V
- ESD Protection > 20 kilovolts
- Complies with
  - 61000-4-2(ESD):Air  $\pm 15kV$ , Contact  $\pm 8kV$
  - 61000-4-4(EFT):40A-5/50ns
  - 61000-4-5(Surge):16A, 8/20us

## Applications

- Cellular Handsets and Accessories
- Portable Electronics
- Control & Monitoring Systems
- Servers, Notebooks, and Desktop PCs
- Set-Top Box
- Communication Systems

## Electrical characteristics

Symbol	Parameter
$V_{RWM}$	Stand-off voltage
$V_{BR}$	Breakdown voltage
$V_C$	Clamping voltage
$I_R$	Leakage current
$I_{PP}$	Peak pulse current
$C_j$	Capacitance
$V_F$	Forward voltage drop

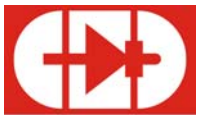


## Absolute maximum rating

Rating	Symbol	Value	Units
Peak Pulse Power ( $t_p=8/20\mu S$ )	$P_{pp}$	300	W
Peak Pulse Current ( $t_p=8/20\mu S$ )	$I_{pp}$	16	A
Operating Temperature	$T_J$	-55 to +150	$^{\circ}C$
Storage Temperature	$T_{STG}$	-55 to +150	$^{\circ}C$

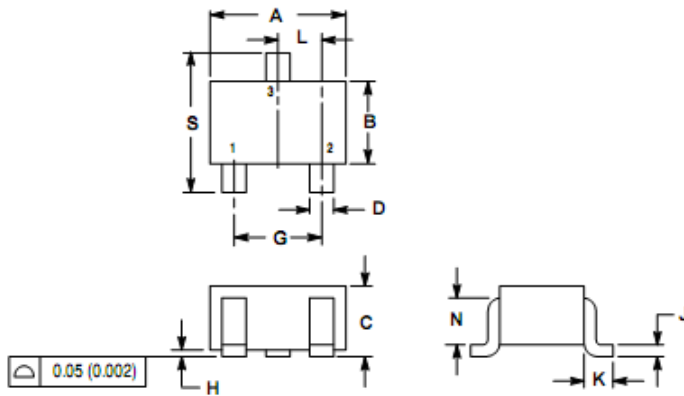
Electrical characteristics @25 $^{\circ}C$  (unless otherwise specified)

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Units
Reverse stand-off voltage	$V_{RWM}$				5	V
Reverse Breakdown voltage	$V_{BR}$	$I_T = 1mA$	6.0		7.4	V
Reverse Leakage Current	$I_R$	$V_{RWM} = 5V$ $T=25^{\circ}C$			5	$\mu A$
Clamping Voltage	$V_C$	$I_{PP} = 1A$ $t_p = 8/20\mu S$			9.8	V
Clamping Voltage	$V_C$	$I_{PP}=16A$ $t_p = 8/20\mu S$			17.5	V
Junction Capacitance	$C_j$	$V_R=0V$ $f = 1MHz$		60	80	pF



Product dimension and pad size

SC-70 (SOT-323)  
CASE 419-04  
ISSUE L

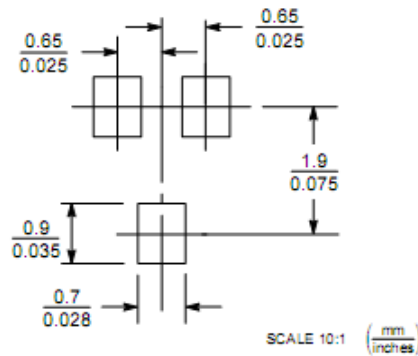


NOTES:  
1. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M, 1982.  
2. CONTROLLING DIMENSION: INCH.

DIM	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.071	0.087	1.80	2.20
B	0.045	0.053	1.15	1.35
C	0.092	0.040	0.90	1.00
D	0.012	0.016	0.30	0.40
G	0.047	0.055	1.20	1.40
H	0.000	0.004	0.00	0.10
J	0.004	0.010	0.10	0.25
K	0.017 REF		0.428 REF	
L	0.026 BSC		0.650 BSC	
N	0.028 REF		0.700 REF	
S	0.079	0.095	2.00	2.40

STYLE 4:  
PIN 1: CATHODE  
2: CATHODE  
3: ANODE

SOLDERING FOOTPRINT\*



Revision History

Revision	Date	Changes
1.0	2008-7-3	-
1.1	2008-7-12	1: add Ipp=16A; 2: change the ESD protection from 40Kvto 20kv; 3: 61000-4-5(Surge):from 24A to 16A 4: add the max capacitance 80pF 5: change the VC from 12.5 to 17.5,and the condition Ipp from 5A to 16A