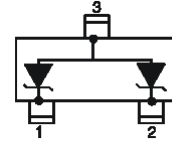


Description

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

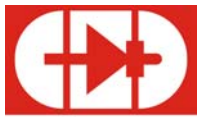
- 300 Watts peak pulse power ($t_p=8/20\mu s$)
- Low clamping voltage
- Protects one bidirectional or two unidirectional lines
- Working voltages: 5V
- ESD Protection > 20 kilovolts
- Complies with
 - 61000-4-2(ESD):Air $\pm 15kV$, Contact $\pm 8kV$
 - 61000-4-4(EFT):40A-5/50ns
 - 61000-4-5(Surge):16A,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

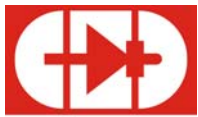


Absolute maximum rating

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	°C
Storage Temperature	T_{STG}	-55 to +150	°C

Electrical characteristics @25°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	μA
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

**GOOD-ARK****Bidirectional ESD Protection Array****SES5VT323-3****SES Series**

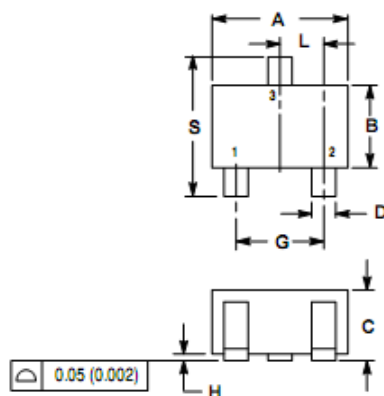
ROHS

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
E	0.047	0.055	1.20	1.40
F	0.000	0.004	0.00	0.10
G	0.004	0.010	0.10	0.25
H	0.017	REF	0.425	REF
I	0.026	BSC	0.650	BSC
J	0.028	REF	0.700	REF
K	0.079	0.095	2.00	2.40

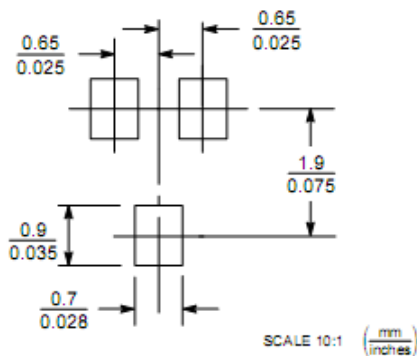
STYLE 4:

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 $I_{pp}=16A$; 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 I_{pp} from 5A to 16A