

DESCRIPTION

The SESMXX series are transient voltage suppressor (TVS) arrays, designed for power or data line applications that provide protection against ESD, tertiary lightning and switching transients. This series offers low clamping voltage for the protection of sensitive interfaces.

FEATURES

- > 350 Watts peak pulse power per Line($t_p=8/20\mu s$)
- > Protects one bidirectional line or two unidirectional lines
- > Low clamping voltage
- > RoHS Compliant

APPLICATIONS

- > Cellular Handsets and Accessories
- > Portable Electronics
- > Industrial Controls
- > Set-Top Box
- > Instrumentation
- > Servers, Notebook, and Desktop PC

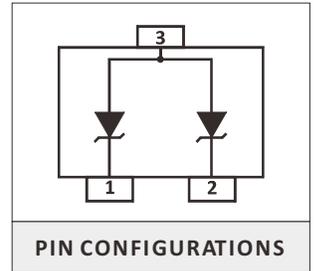
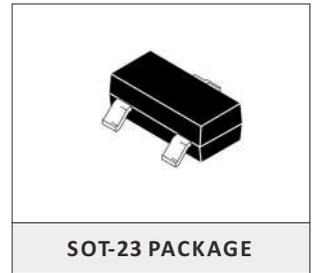
IEC COMPATIBILITY

- > IEC61000-4-2 (ESD) $\pm 15kV$ (air), $\pm 8kV$ (contact)
- > IEC61000-4-4 (EFT) 40A (5/50ns)
- > IEC61000-4-5 (Lightning) 12A (8/20 μs)

TYPICAL DEVICE CHARACTERISTICS

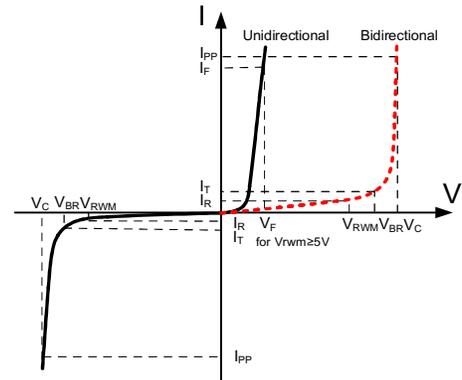
MAXIMUM RATINGS @ 25°C UNLESS OTHERWISE SPECIFIED			
PARAMETER	SYMBOL	VALUE	UNIT
Peak Pulse Power ($t_p=8/20\mu s$ waveform)	P_{PP}	350	W μs
Lead Soldering Temperature	T_L	260(10 sec.)	°C
Operating Temperature Range	T_J	-55~125	°C
Storage Temperature Range	T_{STG}	-55~150	°C

ELECTRICAL CHARACTERISTICS PER LINE @ 25°C UNLESS OTHERWISE SPECIFIED									
PART NUMBER	DEVICE MARKING	V_{RWM} (V) Max.	V_{BR} (V) Min.	I_T (mA)	V_C @1A Max.	V_C		I_R (μA) Max.	C_T (pF) Max.
						Max.	@A		
SESM03	M03	3.3	4.0	1	6.5	15.0	25	100	400
SESM05	M05	5.0	6.0	1	9.8	16.0	24	10	300
SESM08	M08	8.0	8.5	1	13.4	19.0	18	5	250
SESM12	M12	12.0	13.3	1	19.0	24.0	13	1	150
SESM15	M15	15.0	16.7	1	24.0	28.0	6	1	100
SESM24	M24	24.0	26.7	1	43.0	52.0	6	1	90
SESM36	M36	36.0	40.0	1	51	75.0	4	1	60



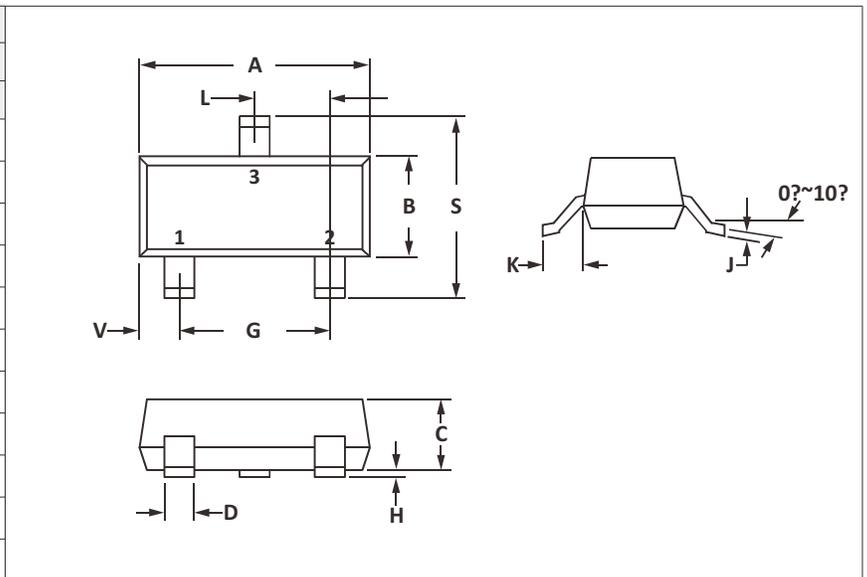
ELECTRICAL PARAMETERS (T=25°C)

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

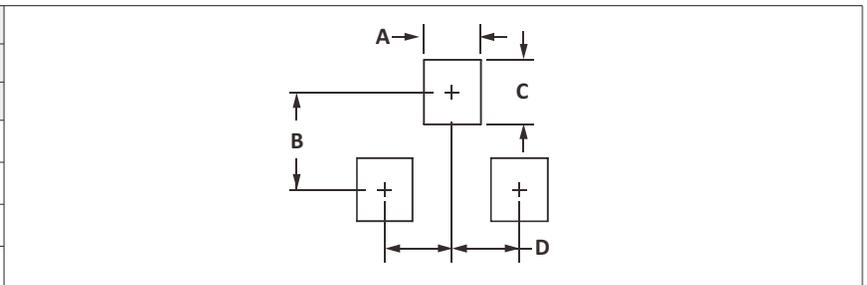


SOT-23 PACKAGE INFORMATION

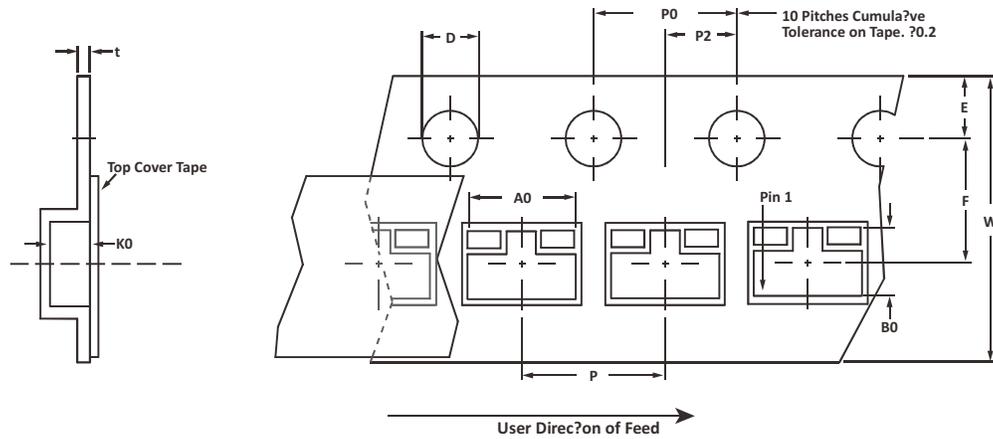
OUTLINE DIMENSIONS				
DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	2.80	3.04	0.110	0.120
B	1.20	1.40	0.047	0.055
C	0.89	1.11	0.035	0.044
D	0.37	0.50	0.015	0.020
G	1.78	2.04	0.070	0.081
H	0.013	0.100	0.001	0.004
J	0.085	0.177	0.003	0.007
K	0.45	0.60	0.018	0.024
L	0.89	1.02	0.035	0.040
S	2.10	2.50	0.083	0.098
V	0.45	0.60	0.018	0.024



PAD LAYOUT DIMENSIONS				
DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	0.71	0.97	0.028	0.038
B	1.88	2.13	0.074	0.084
C	0.71	0.97	0.028	0.038
D	0.81	1.07	0.032	0.042



TAPE AND REEL



SPECIFICATIONS												
REEL DIA.	TAPE WIDTH	A0	B0	K0	D	E	F	W	P0	P2	P	tmax
178mm (7")	8mm	3.15 ± 0.10	2.77 ± 0.10	1.30 ± 0.10	1.50 ± 0.10	1.75 ± 0.10	3.50 ± 0.05	8.00 ± 0.30	4.00 ± 0.10	2.00 ± 0.05	4.00 ± 0.10	0.228

NOTES

1. Dimensions are in millimeters.
2. Surface mount product is taped and reeled in accordance with EIA-481.
3. Suffix - T7 = 7" Reel - 3,000 pieces per 8mm tape.

ORDERING INFORMATION					
BASE PART NUMBER (xx = Voltage)	LEAD FREE SUFFIX	TAPE SUFFIX	QTY/REEL	REEL SIZE	TUBE QTY
SESMXX	-LF	-T7	3,000	7"	n/a
This device is only available in a Lead-Free configuration.					



CONTACT US

Headquarters

A Building Caohejing I&E Park Pujiang Minhang Shanghai
China

Hotline

400-021-5756

Web

<http://www.semiware.com.cn>

By Telephone

Sales: 86-21-3463-7345
Customer Service: 86-21-3463-7172-8810/8826
Technical Support: 86-21-3463-7173-8811

By Email

Sales: sales03@semiware.com.cn
Customer Service: sales17@semiware.com.cn
Technical Support: fae03@semiware.com.cn

By Fax

General: 86-21-3965-0654
Sales: 86-21-3463-7458

COPYRIGHT ©Semiware 2009 - This literature is subject to all applicable copyright laws and is not for resale in any manner.

SPECIFICATIONS: Semiware reserves the right to change the electrical and or mechanical characteristics described herein without notice.

DESIGN CHANGES : Semiware reserves the right to discontinue product lines without notice and that the final judgement concerning selection and specifications is the buyer's and that in furnishing engineering and technical assistance. Semiware assumes no responsibility with respect to the selection or specifications of such products. Semiware makes no warranty, representation or guarantee regarding the suitability of its products for any particular purpose, nor does Semiware assume any liability arising out of the application or use of any product or circuit and specifically disclaims any and all liability without limitation special, consequential or incidental damages.

LIFE SUPPORT POLICY: Semiware products are not authorized for use in life support systems without written consent from the factory.

