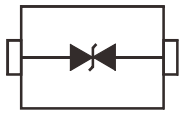
SESD24C
High Powered Tvs Array

DESCRIPTION

The SESD24C is a transient voltage suppressor array designed for ESD protection of SMART phones, laptop computers and other portable electronics . This silicon based diodes offer superior clamping voltage and performance compared to other technologies such as MLVs.

The SESD24C can be utilized as a single line protector in a bidirectional configuration . The SOD-323 small package configuration offers designers the flexibility of placement on the printed circuit board for each I/O port or voltage bus. The SESD24C Series meets the IEC 61000-4-2 (ESD), 61000-4-4 (EFT) and 61000-4-5 requirements.

SOD-323 PACKAGE



PIN CONFIGURATIONS

FEATURES

>300 Watts Peak Pulse Power per Line (tp=8/20μs)
>Protects One Power or I/O Port
>Low clamping voltage
>Working voltages: 24V
>Low leakage current

APPLICATIONS

>Cell Phone Handsets and Accessories
>Microprocessor based equipment
>Personal Digital Assistants (PDA's)
>Notebooks, Desktops, and Servers
>Portable Instrumentation
>Peripherals
>USB Interface

IEC COMPATIBILITY

>IEC61000-4-2 (ESD) ±15kV (air), ±8kV (contact)

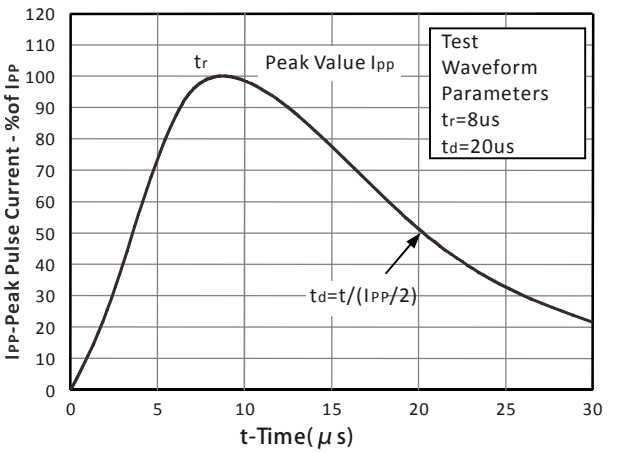
MAXIMUM RATINGS @ 25°C UNLESS OTHERWISE SPECIFIED

PARAMETER	SYMBOL	VALUE	UNIT
Peak Pulse Power (tp=8/20μs waveform)	P_{PP}	300	Watts
Lead Soldering Temperature	T_L	260(10 sec.)	°C
Operating Temperature Range	T_J	-40~150	°C
Storage Temperature Range	T_{STG}	-40~150	°C

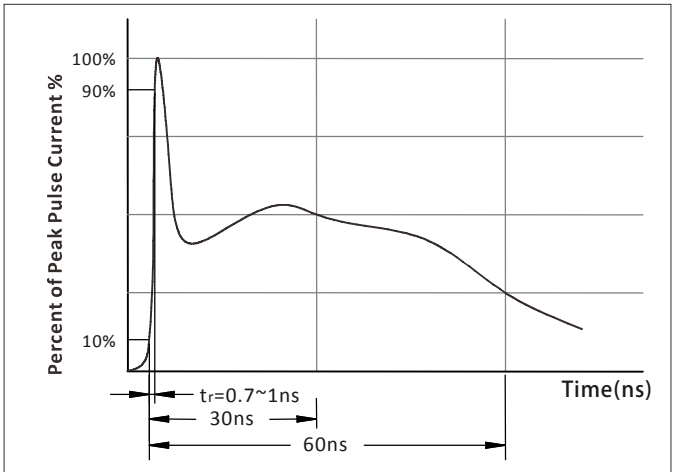
ELECTRICAL CHARACTERISTICS PER LINE @ 25°C UNLESS OTHERWISE SPECIFIED

PART NUMBER	DEVICE MARKING	V_{RWM} (V) Max.	V_B (V) Min.	I_T (mA)	V_C @1A Max.	V_C Max.	V_C @A	I_R (uA) Max.	C_T (pF) Typ.
SESD24C	2H	24.0	26.7	1	43.0	52.0	6.0	1	75

CHARACTERISTIC CURVES



8/20 μs Pulse Waveform



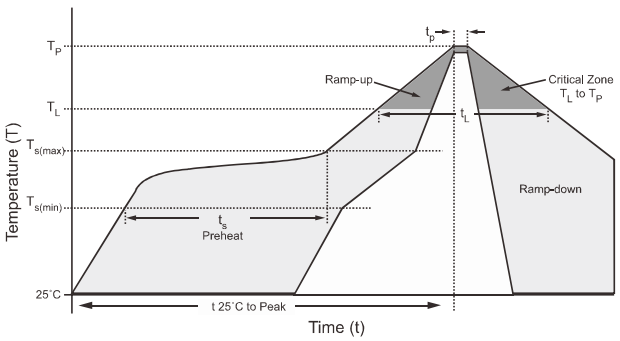
ESDPulse Waveform (according to IEC 61000-4-2)

ENVIRONMENTAL CHARACTERISTICS

Testing Items	Technical Standards
High Temperature Reverse Bias Test	Temperature:150±3℃,Bias=80%V_{DRM} ;Time:168H
High Temperature Life Test	Temperature:150℃ ;Time:168H
High-Low Temperature Cycle Test	Temperature:From -40℃ to 150℃ ;Dwell Time:30min,10-100 Cycles
High Temperature&High Humidity Test	Temperature:85℃.Humidity:85%; Time:168H
Pressure Cooker Test	Temperature:121℃,2 atm.Humidity:100%; Time:24H To 168H
Resistance Of Soldering Heat	Temperature:260±5℃;Time Of Dip Soldering:10s,3 Times

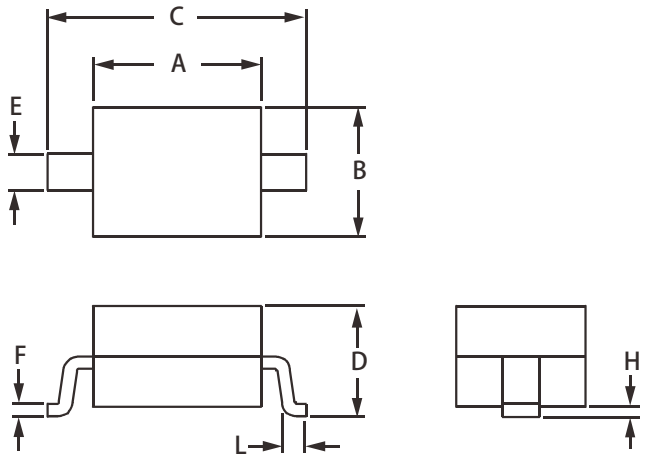
REFLOW PROFILE

Reflow Condition		Lead–free assembly
Pre Heat	Temperature Min (Ts(min))	150°C
	Temperature Max (Ts(max)	200°C
	Time (min to max) (ts)	60 – 180 secs
Average ramp up rate (Liquidus Temp (T_L) to peak		3°C/second max
T_S(max)to T_L - Ramp-up Rate		3°C/second max
Reflow	Temperature (T_L) (Liquidus)	217°C
	Time (min to max) (ts)	60 – 150 seconds
Peak Temperature (T_P)		260°C
Time within 5°C of actual peak Temperature (tp)		20 – 40 seconds
Ramp-down Rate		6°C/second max
Time 25°C to peak Temperature (T_P)		8 minutes Max.
Do not exceed		260°C

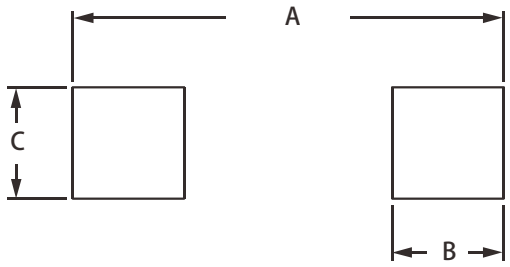


SOD-323 PACKAGE INFORMATION

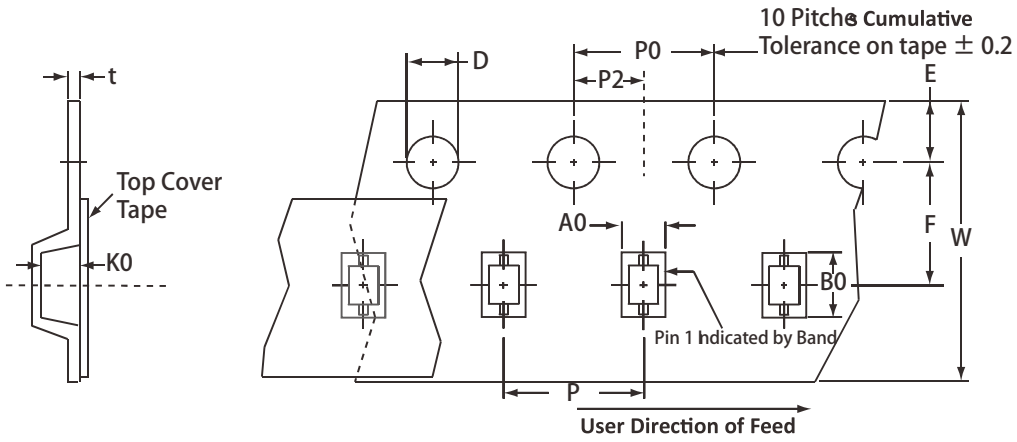
OUTLINE DIMENSIONS				
DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	1.60	1.90	0.063	0.075
B	1.15	1.45	0.045	0.057
C	2.39	2.70	0.094	0.106
D	0.80	1.10	0.031	0.043
E	0.25	0.40	0.010	0.016
F	0.10	0.20	0.004	0.008
H	-	0.10	-	0.004
L	0.20	-	0.008	-



PADLAYOUT DIMENSIONS				
DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	2.87	3.12	0.113	0.123
B	0.66	0.91	0.026	0.036
C	0.66	0.91	0.026	0.036



TAPE AND REEL



SPECIFICATIONS												
REEL DIA.	TAPE WIDTH	A0	B0	K0	D	E	F	W	P0	P2	P	tmax
178mm (7")	8mm	1.55 ± 0.10	2.90 ± 0.10	1.35 ± 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	0.25

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.
4. Marking on Part - marking code (see page 1)

CONTACT US

Headquarters
Room 43A, Block C, Electronic and Technology Building, Shennan Road, Futian District, Shenzhen
China

Hotline
+86-0755-83239646

Web
Http://www.szshaoxin.com

By Telephone
General: +86-0755-83239646

By Fax
+86-0755-83239644