

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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SD32303 THRU SD32324 TVS ARRAY


SOD-323

Features

- Protects 3.3,5,12,15,24V Components
- Unidirectional
- 300 W @8/20 us
- Protects 1 Lines
- SOD-323 Packaging
- This is a Pb-free Device
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request

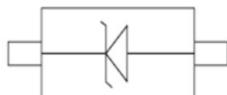
Description

The SD323XX series of TVS array have been designed to provide unidirectional protection for sensitive electronics from damage due to voltage transients caused by electrostatic discharge (ESD), electrical fast transients(EFT), Lightning and other voltage-induced transient events. The device can be used to protect combinations of four unidirectional lines.

Application

- Cell phone handsets and accessories
- Microprocessor based equipment
- Personal digital assistants(PDA's)
- Portable instrumentation
- Pagers peripherals

Schematic & Pin Configuration



Mechanical Characteristics

- SOD-323, Surface Mount Package
- Packaging: Tape & Reel per EIA 481

Maximum Ratings@ $T_A=25^\circ C$ unless otherwise specified

Parameter	Symbol	Value	Units
Peak Pulse Power ($tp=8/20 \mu s$)	P_{pp}	300	W
Operating Temperature	T_J	-55 to 125	° C
Storage Temperature	T_{STG}	-55 to 150	° C
Lead Soldering Temperature	T_L	260(10 sec)	° C

Electrical Characteristics@ $T_A=25^\circ\text{C}$ unless otherwise specified

Part Name	Marking Code	Stand-off Voltage V _{wm} (v) Max	Breakdown Voltage V _{BR} @1mA (V) Min	Clamping Voltage V _c @ 1 A (V) Max	Leakage Current I _r @V _{wm} (uA) Max	Capacitance (f=1MHz) @0V (pF) Max	Temperature Coefficient Of V _{BR} A(V _{BR}) Mv/° C Max
SD32303	S03	3.3	4	7	200	800	-3
SD32305	S05	5.0	6	9.8	20	600	3
SD32312	S12	12.0	13.3	19	1	185	10
SD32315	S15	15.0	16.7	24	1	140	13
SD32324	S24	24.0	26.7	43	1	90	30

Ratings and Characteristics Curves

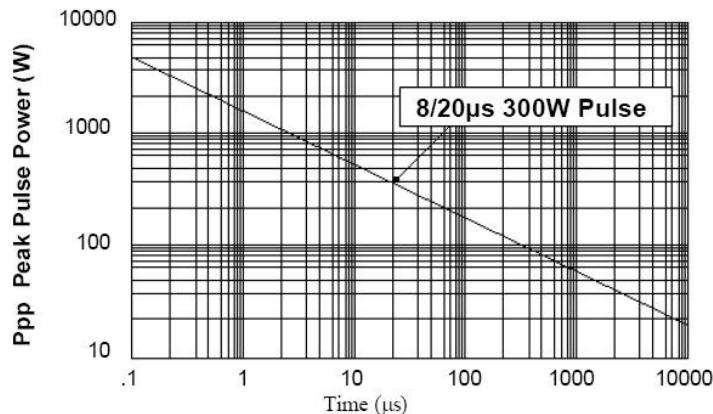


Figure 1. Peak Pulse Power Vs Pulse Time (μs)

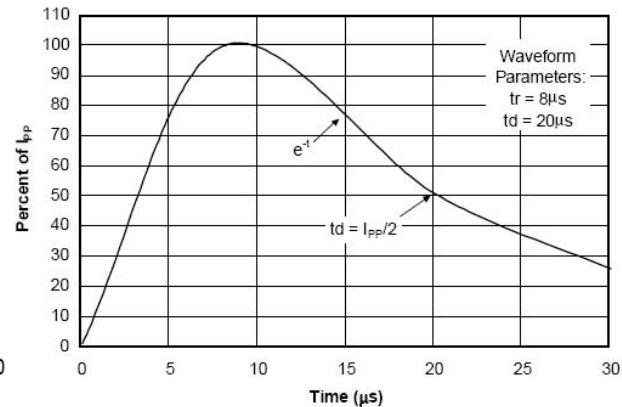
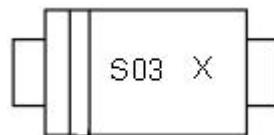


Figure 2. Pulse Wave Form

Ordering Information

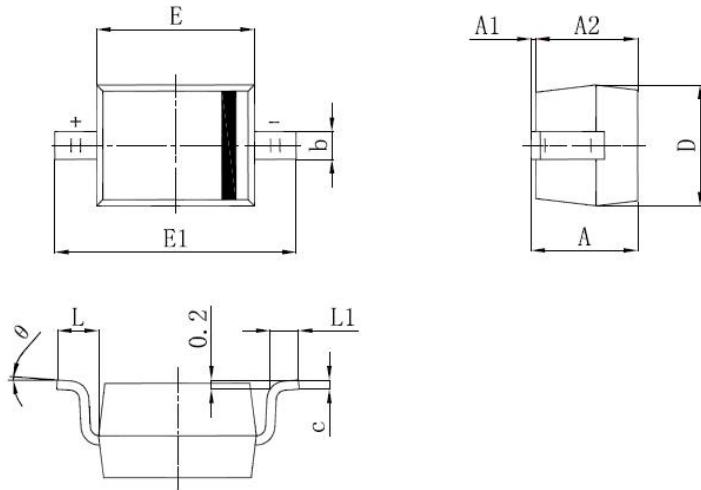
Device	Package	Shipping
SD32303 THRU SD32324	SOD-323 (Pb-Free)	3000pcs / reel

For information on tape and reel specifications, including part orientation and tape sizes, please refer to our tape and reel packaging specification.

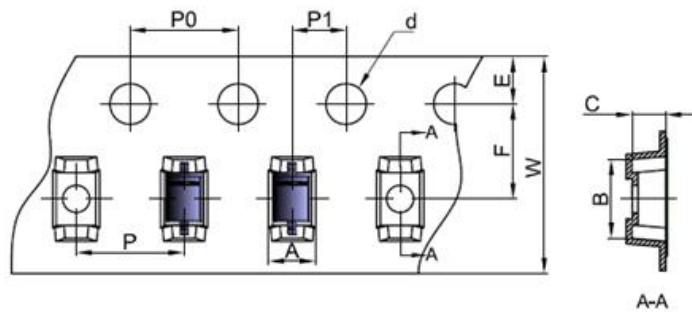
Marking Diagram


S03 = Marking Code

X = Data Code

Mechanical Dimensions SOD-323


SYMBOL	Millimeters		Inches	
	MIN.	MAX.	MIN.	MAX.
A	-	1.000	-	0.039
A1	0.000	0.100	0.000	0.004
A2	0.800	0.900	0.031	0.035
b	0.250	0.350	0.010	0.014
c	0.080	0.150	0.003	0.006
D	1.200	1.400	0.047	0.055
E	1.600	1.800	0.063	0.071
E1	2.500	2.700	0.098	0.106
L	0.475 REF.		0.019 REF.	
L1	0.250	0.400	0.010	0.016
θ	0°	8°	0°	8°

Carrier Tape Specification SOD-323


SYMBOL	Millimeters	
	Min.	Max.
B	2.85	2.95
C	1.20	1.30
d	1.40	1.60
E	1.65	1.85
F	3.40	3.60
P	3.90	4.10
P0	3.90	4.10
P1	1.90	2.10
W	7.90	8.30

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