



**THE DATASHEET OF
SD05LC**



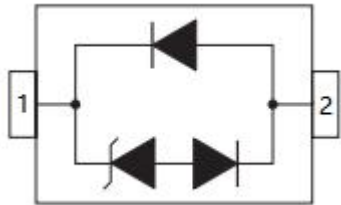
SD03LC THRU SD24LC TVS ARRAY



Features

- Protects 3.3, 5, 8, 12, 15, 18, 24V Components
- 350 Watts Peak Pulse Power per Line (tp = 8/20µs)
- Unidirectional Configurations
- Replacement for MLV (0805)
- Protects One Power or I/O Port
- Low Clamping Voltage
- Terminals finish: 100% Pure Tin
- This is a Pb-free Device
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request

Schematic & Pin Configuration



Application

- Ethernet - 10/100/1000 Base T
- Cellular Phones
- Handheld - Wireless Systems
- Personal Digital Assistant (PDA)
- USB Interface
- Pagers peripherals

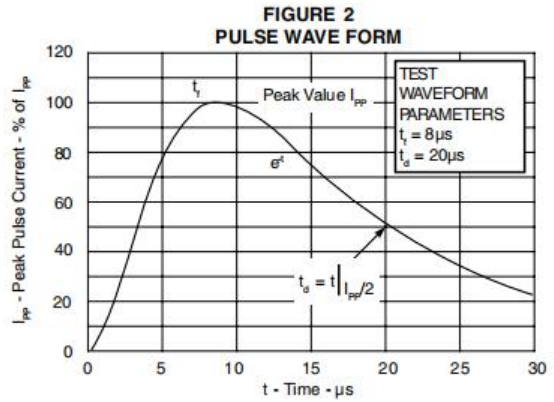
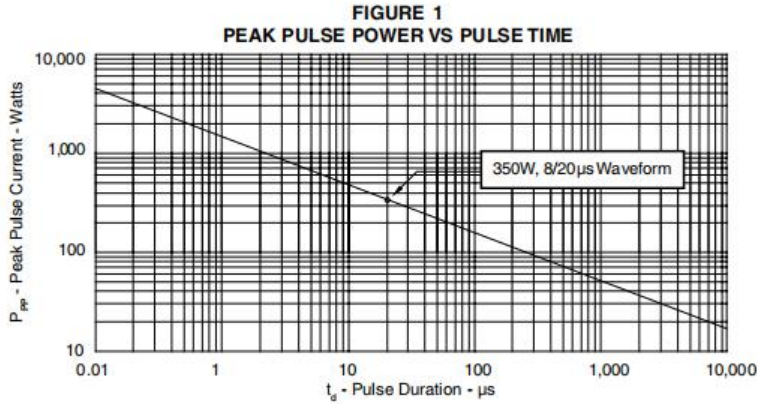
Maximum Ratings@T_A=25° C unless otherwise specified

Parameter	Symbol	Value	Units
Peak Pulse Power (tp=8/20 µ s)	P _{pp}	350	W
Operating Temperature	T _J	-55 to 150	° C
Storage Temperature	T _{STG}	-55 to 150	° C

Electrical Characteristics@T_A=25°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	Clamping Voltage V _c @ I _{PP} (V) Max	Peak Pulse Current (tp=8/20us) I _{PP} (A)	Leakage Current I _r @V _{wm} (uA) Max	Capacitance (f=1MHz) @0V (pF) Max
SD03LC	03LC	3.3	4	7	19	20	5	5
SD05LC	05LC	5	6	9.8	18.3	17	5	5
SD08LC	08LC	8	8.5	13.4	18.5	17	2	5
SD12LC	12LC	12	13.3	19	28.6	11	1	5
SD15LC	15LC	15	16.7	24	31.8	10	1	5
SD18LC	18LC	18	20	29	45	8	1	5
SD24LC	24LC	24	26	43	56	6	1	5

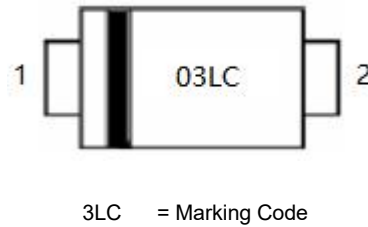
Ratings and Characteristics Curves



Ordering Information

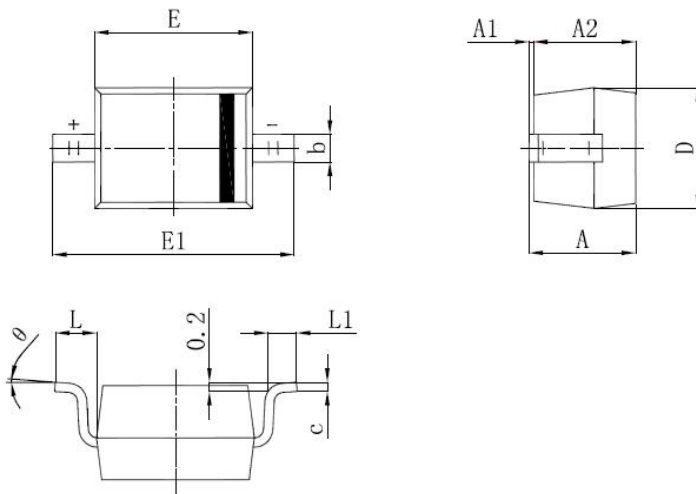
Device	Package	Shipping
SD03LC THRU SD24LC	SOD-323 (Pb-Free)	3000pcs / reel
SD03LCTR THRU SD24LCTR	SOD-323 (Pb-Free)	3000pcs / reel

Marking Diagram



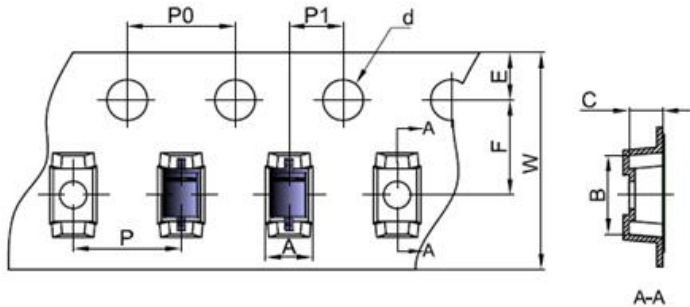
For information on tape and reel specifications, including part orientation and tape sizes, please refer to our tape and reel packaging specification.

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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-  Shortage Management
-  Alternative Solution
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