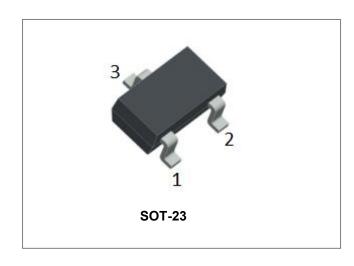


Technical Data Data Sheet N2421, REV.-





#### S23LCC05 TVS ARRAY



#### **Features**

- Compatible with IEC 61000-4-2 (ESD): Air 15kV, Contact 8kV
- Compatible with IEC 61000-4-4 (EFT): 40A, 5/50ns
- Compatible with IEC 61000-4-5 (Surge): 12A, 8/20µs Level 1(Line Ground) & Level 2(Line-Line)
- Low Clamping Voltage
- RoHS Compliant
- Small SMD plastic package
- 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**

- High-Speed Data Transmission Interfaces
- Cellular Phones
- MP3 Players
- Portable Electronics
- Wireless Bus Protection

#### Maximum Ratings@T<sub>A</sub>=25°C unless otherwise specified

Parameter	Symbol	Value	Units
Peak Pulse Power (tp=8/20 μ s)	Ppp	350	W
Operating Storage Temperature Range	Тѕтс	-55 to 150	°C
Operating Junction Temperature	TJ	-55 to 150	°C

#### Electrical Characteristics@TA=25°C unless otherwise specified

Characteristics	Symbol	Condition	Min.	Тур.	Max.	Units
Breakdown Voltage*	V <sub>BR</sub>	IR=1mA	6	-	-	V
Reverse Standoff Voltage*	V <sub>RWM</sub>	-	-	-	5	V
Reverse Leakage Current*	I <sub>RM</sub>	VR=5V	-	-	5	μA
Clamp Voltage	Vc	Ipp=1A tp=8/20µs	-	-	9.8	V
Diode Capacitance	C <sub>D</sub>	V <sub>R</sub> =0V, f=1MHz	-	-	3	pF

<sup>\*</sup> Pulse width < 300  $\mu$ s, duty cycle < 2%

- China Germany Korea Singapore United States
  - http://www.smc-diodes.com sales@ smc-diodes.com •



Technical Data Data Sheet N2421, REV.-



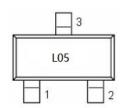


## **Ordering Information**

Device	Package	Shipping
S23LCC05	SOT-23	3000pcs / reel
0202000	(Pb-Free)	0000000071001

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

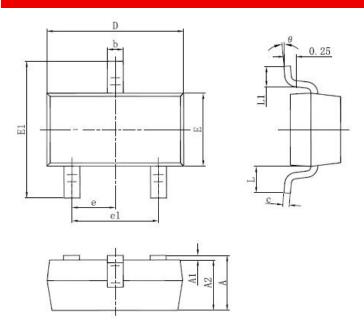
## **Marking Diagram**



Where L05 is S23LCC05

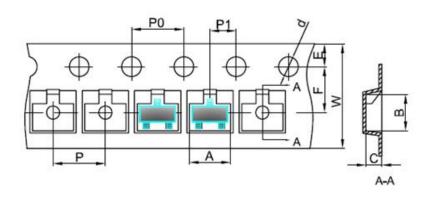
L05 = Marking code

## **Mechanical Dimensions SOT-23**



CVMDOL	Millimeters		Inches		
SYMBOL	MIN.	MAX.	MIN.	MAX.	
Α	0.900	1.150	0.035	0.045	
A1	0.000	0.100	0.000	0.004	
A2	0.900	1.050	0.035	0.041	
b	0.300	0.500	0.012	0.020	
С	0.080	0.150	0.003	0.006	
D	2.800	3.000	0.110	0.118	
Е	1.200	1.400	0.047	0.055	
E1	2.250	2.550	0.089	0.100	
е	0.950 TYP.		0.037 TYP.		
e1	1.800	2.000	0.071	0.079	
L	0.550 REF.		0.022 REF.		
L1	0.300	0.500	0.012	0.020	
θ	0°	8°	0°	8°	

## **Carrier Tape Specification SOT-23**



SYMBOL	Millimeters			
STIVIBUL	Min.	Max.		
Α	3.05	3.25		
В	2.67	2.87		
С	1.12	1.32		
d	1.40	1.60		
Е	1.65	1.85		
F	3.40	3.60		
Р	3.90	4.10		
P0	3.90	4.10		
P1	1.90	2.10		
W	7.90	8.30		

- China Germany Korea Singapore United States
  - http://www.smc-diodes.com sales@ smc-diodes.com •



# Technical Data Data Sheet N2421, REV.-





#### DISCLAIMER:

- 1- The information given herein, including the specifications and dimensions, is subject to change without prior notice to improve product characteristics. Before ordering, purchasers are advised to contact the SMC Diode Solutions sales department for the latest version of the datasheet(s).
- 2- In cases where extremely high reliability is required (such as use in nuclear power control, aerospace and aviation, traffic equipment, medical equipment, and safety equipment), safety should be ensured by using semiconductor devices that feature assured safety or by means of users' fail-safe precautions or other arrangement.
- 3- In no event shall SMC Diode Solutions be liable for any damages that may result from an accident or any other cause during operation of the user's units according to the datasheet(s). SMC Diode Solution assumes no responsibility for any intellectual property claims or any other problems that may result from applications of information, products or circuits described in the datasheets.
- 4- In no event shall SMC Diode Solutions be liable for any failure in a semiconductor device or any secondary damage resulting from use at a value exceeding the absolute maximum rating.
- 5- No license is granted by the datasheet(s) under any patents or other rights of any third party or SMC Diode Solutions.
- 6- The datasheet(s) may not be reproduced or duplicated, in any form, in whole or part, without the expressed written permission of SMC Diode Solutions.
- 7- The products (technologies) described in the datasheet(s) are not to be provided to any party whose purpose in their application will hinder maintenance of international peace and safety nor are they to be applied to that purpose by their direct purchasers or any third party. When exporting these products (technologies), the necessary procedures are to be taken in accordance with related laws and regulations..