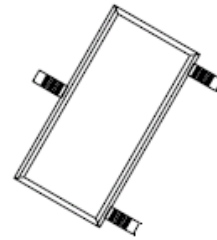


TVS SERIES

FEATURES

- ✓ Protects 3.3, 5, 12, 15, 24 ,36V Components
- ✓ Unidirectional or Bidirectional
- ✓ 300 W @ 8/20 μs
- ✓ Protects 1 or 2 Lines
- ✓ Low leakage
- ✓ SOT-23 Packaging
- ✓ This is a Pb - Free Device
- ✓ All SMC parts are traceable to the wafer lot
- ✓ Additional testing can be offered upon request

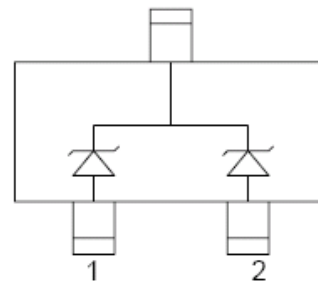
SOT-23



DESCRIPTION

The S23CXX series of TVS array have been designed to provide unidirectional or bidirectional protection for sensitive electronics from damage due to voltage transients caused by electrostatic discharge(ESD),electrical fast transients(EFT), secondary lightning and other voltage-induced Transient events.The device can be used to protect 2 unidirectional or 1 bidirectional data line or interface line.

SCHEMATIC & PIN CONFIGURATION



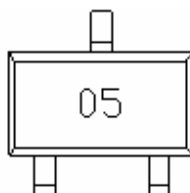
APPLICATION

- ✓ RS-232,RS-422,RS-423
- ✓ Cellular Handsets & Accessories
- ✓ Universal Serial Bus (USB) Port Protection
- ✓ Portable Electronics
- ✓ LAN/WAN Equipment
- ✓ Wireless Bus Protection

MECHANICAL CHARACTERISTICS

- ✓ SOT-23 Surface Mount Package
- ✓ Approximate Weight: 0.015 grams
- ✓ PIN #1 Indicator: DOT on top of package
- ✓ Packaging: Tape & Reel per EIA 481

MARKING DIAGRAM



Where 05 is S23C05

05 = Part Name

Cautions: Molding resin
Epoxy resin UL:94V-0



Ordering Information:

Device	Package	Shipping
S23C03 THRU S23C36	SOT-23(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.

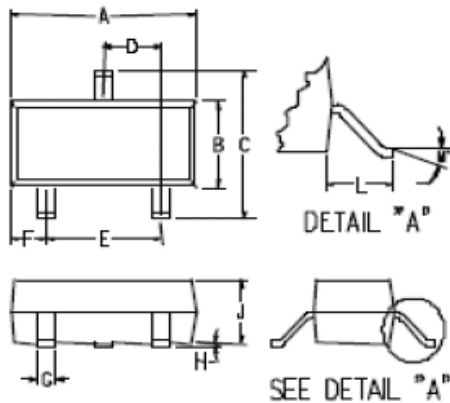
ABSOLUTE MAXIMUM RATINGS

Symbol	Parameter	Value	Unit
P	Peak Pulse Power, 8/20 μ s Waveshape	300	W
T _J	Operating Temperature	-55 to +125	$^{\circ}$ C
T _{STG}	Storage Temperature	-55 to +150	$^{\circ}$ C
T _L	Lead Soldering Temperature	260 (10 Sec.)	$^{\circ}$ C

ELECTRICAL CHARACTERISTICS @ 25 °C

Part Number	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} (μ A) Max	Capacitance (f = 1MHz) C @ 0V (pF)Pin1-3,2-3 Max	Capacitance (f = 1MHz) C @ 0V (pF)Pin1-2 Max
S23C03	3.3	4	8	200	600	300
S23C05	5.0	6	10.8	20	400	200
S23C12	12.0	13.3	19	0.1	160	80
S23C15	15.0	16.7	25	0.1	130	65
S23C24	24.0	26.7	44	0.1	80	40
S23C36	36.0	40.0	60	0.1	50	28

PACKAGE OUTLINES & DIMENSIONS



DIM	INCHES		MILLIMETERS	
	MIN.	MAX	MIN.	MAX.
A	0.110	0.119	2.794	3.023
B	0.047	0.055	1.194	1.397
C	0.083	0.104	2.108	2.642
D	0.035	0.040	0.889	1.016
E	0.070	0.081	1.778	2.057
F	0.017	0.024	0.432	0.610
G	0.014	0.020	0.356	0.508
H	0.005	0.004	0.013	0.102
J	0.034	0.040	0.864	1.016
K	0.003	0.007	0.076	0.178
L	-	0.022	-	0.559
M	-	8°	-	8°

TYPICAL CHARACTERISTICS

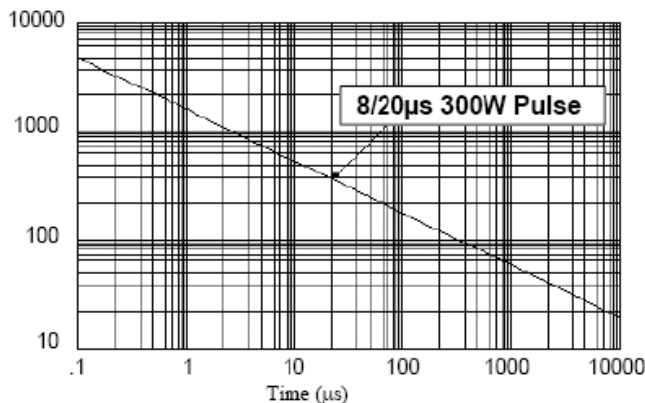


Figure 1. Peak Pulse Power Vs Pulse Time (μ s)

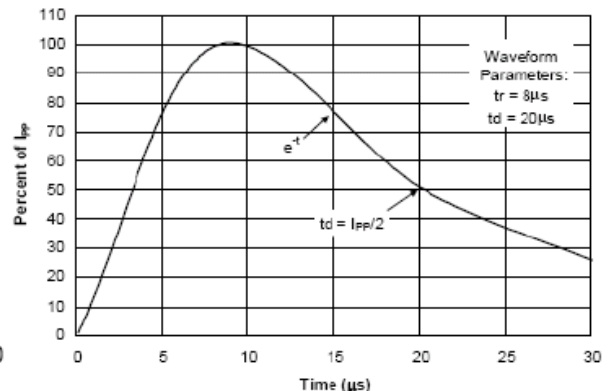


Figure 2. Pulse Wave Form

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