S2303-G thru S2336-G

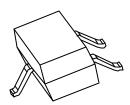
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TVS ARRAY SERIES

FEATURES

- ✓ Protects 3.3, 5, 12, 15, 24, 36V Components
- ✓ Unidirectional or Bidirectional
- ✓ Low Leakage
- ✓ Provides Electrically Isolated Protection
- √ 300 W @ 8/20 μs
- ✓ Protects 1 or 2 Lines
- √ SOT-23 Packaging
- ✓ Green Products in Compliance with the RoHS Directive

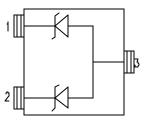


DESCRIPTION

The S23XX-G 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

SOT-23



APPLICATION

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

MECHANICAL CHARACTERISTICS

- ✓ SOT-23 Surface Mount Package
- ✓ Approximate Weight: 0.015 grams
- ✓ Marking: Device Marking Code
- ✓ PIN #1 Indicator: DOT on top of package
- ✓ Packaging: Tape and Reel Per EIA 481

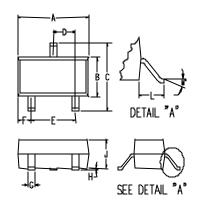
ABSOLUTE MAXIMUM RATINGS						
Symbol	Parameter	Value	Unit			
Р	Peak Pulse Power, 8/20 μs Waveshape	300	W			
T_J	Operating Temperature	-55 to +125	°C			
T_{STG}	Storage Temperature	-55 to +150	°C			
T_L	Lead Soldering Temperature	260 (10 Sec.)	°C			

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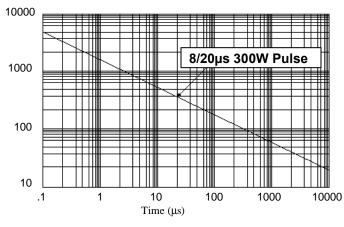
ELECTRICAL CHARACTERISTICS @ 25 °C									
Part Number	Stand-off	Breakdown	Clamping	Leakage	Capacitance	Capacitance			
	Voltage	Voltage	Voltage	Current	С	С			
		V_{BR}	V _c	I _R	@ 0V 1MHz	@ 0V 1MHz			
	V_{wm}	@1mA	@ 1 A	@ V _{wm}	(pF)	(pF)			
	(v)	(V)	(V)	(μA)	Pin 1-3 or 2-3	Pin 1- 2			
	Max	Min	Max	Max	Max	Max			
S2303-G	3.3	4	8	200	600	300			
S2305-G	5.0	6	10.8	20	400	200			
S2312-G	12.0	13.3	19	0.1	160	80			
S2315-G	15.0	16.7	25	0.1	130	65			
S2324-G	24.0	26.7	44	0.1	80	40			
S2336-G	36.0	40.0	60	0.1	50	28			

PACKAGE OUTLINES & DEMENSIONS



	INCI	HES	MILLIMETERS		
DIM	MIN.	MAX	MIN.	MAX.	
A	0.110	0.119	2.794	3.023	
В	0.047	0.055	1.194	1.397	
С	0.083	0.104	2.108	2.642	
D	0.035	0.040	0.889	1.016	
Е	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	
Н	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



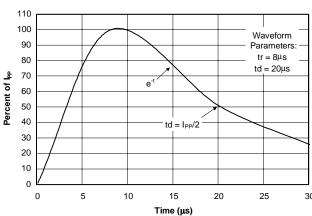


Figure 1. Peak Pulse Power Vs Pulse Time (ms)

Figure 2. Pulse Wave Form



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