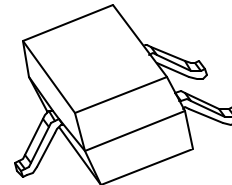
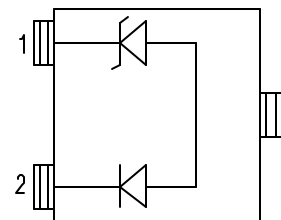


**TECHNICAL DATA**  
**DATA SHEET 4623, REV. -****Green Products****TVS ARRAY SERIES****FEATURES**

- ✓ Protects 3.3, 5, 12, 15, 24 V Components
- ✓ Unidirectional
- ✓ Ultra Low Capacitance 3 pF
- ✓ Low Leakage
- ✓ Provides Electrically Isolated Protection
- ✓ 300 W @ 8/20  $\mu$ s
- ✓ Protects 1 Line
- ✓ SOT-23 Packaging
- ✓ Green Products in Compliance with the RoHS Directive

**SOT-23****DESCRIPTION**

The S23LCXX-G 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), secondary lightning and other voltage-induced transient events. The device can be used to protect 1 unidirectional 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
- ✓ 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
P	Peak Pulse Power, 8/20 $\mu$ s Waveshape	300	W
T <sub>J</sub>	Operating Temperature	-55 to +125	°C
T <sub>STG</sub>	Storage Temperature	-55 to +150	°C
T <sub>L</sub>	Lead Soldering Temperature	260 (10 Sec.)	°C

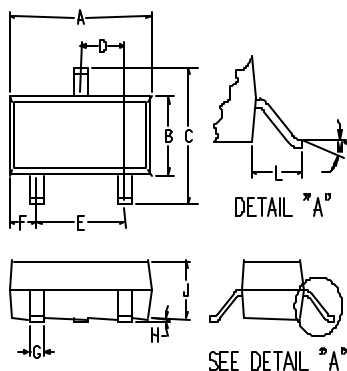
**TECHNICAL DATA**  
**DATA SHEET 4623, REV. -**

**Green Products**

**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 $I_R$ @ $V_{wm}$ ( $\mu$ A) Max	Capacitance (f = 1MHz) C @ 0V (pF) Max	Temperature Coefficient of $V_{BR}$ a( $V_{BR}$ ) mv/°C Max
S23LC03-G	3.3	4	8	200	3	-5
S23LC05-G	5.0	6	10.8	20	3	3
S23LC12-G	12.0	13.3	19	1	3	10
S23LC15-G	15.0	16.7	25	1	3	13
S23LC24-G	24.0	26.7	44	1	3	30

**PACKAGE OUTLINES & DEMENSIONS**



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**

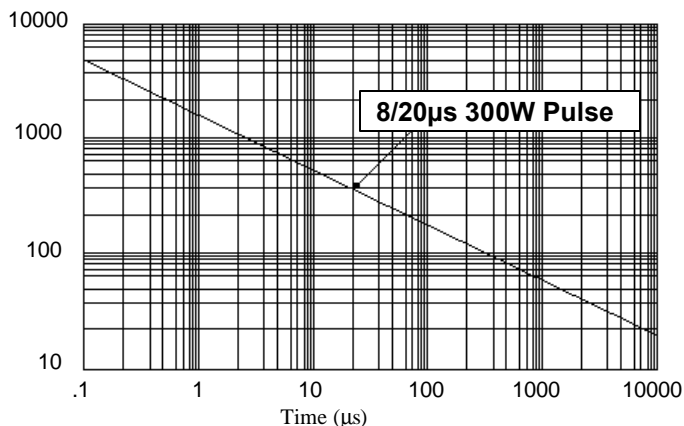


Figure 1. Peak Pulse Power Vs Pulse Time (ms)

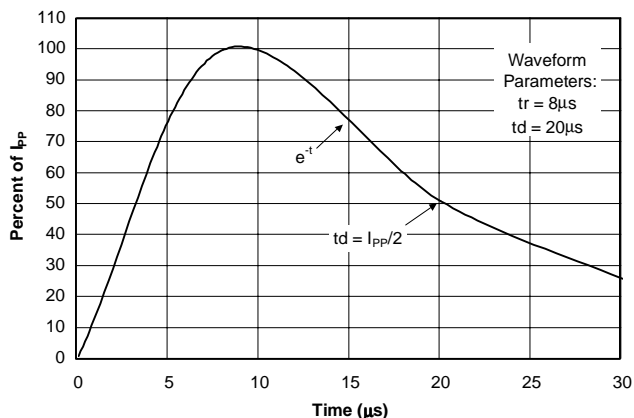


Figure 2. Pulse Wave Form

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