

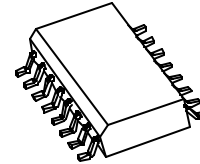
**TECHNICAL DATA**  
**DATA SHEET 1919, REV. -**

**TVS ARRAY SERIES**

**FEATURES**

- ✓ Protects 3.3, 5, 12, 15, 24 V Components
- ✓ Bidirectional
- ✓ Low Capacitance – 25 pF
- ✓ Provides Electrically Isolated Protection
- ✓ 300 W @ 8/20  $\mu$ s
- ✓ Protects 8 Lines
- ✓ SO-16 Packaging

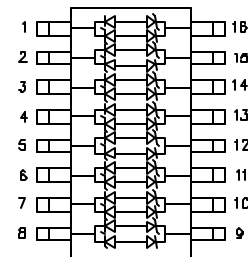
**SO-16**



**DESCRIPTION**

The S16LCCXX-8 series of TVS array have been designed to provide bidirectional protection for sensitive electronics from damage due to voltage transients caused by electrostatic discharge (ESD), electrical fast transients (EFT), lightning and other voltage-induced transient events. The device can be used to protect combinations of 8 bidirectional lines up to 24 volts.

**SCHEMATIC & PIN CONFIGURATION**



**APPLICATION**

- ✓ RS-422, RS-423, & RS-485 Interfaces
- ✓ WAN/LAN Equipment
- ✓ Wireless Communication Circuits
- ✓ Ethernet – 10/100 Base T
- ✓ Low Voltage ASICs

**MECHANICAL CHARACTERISTICS**

- ✓ SO-16 Surface Mount Package
- ✓ Approximate Weight: 0.13 grams
- ✓ Marking: Device number, Date code, & Logo
- ✓ PIN #1 Indicator: DOT on top of package
- ✓ Packaging: Tubes or Tape & Reel per EIA Standard 481

**ABSOLUTE MAXIMUM RATINGS**

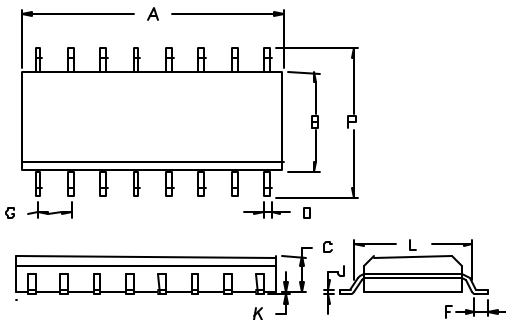
Symbol	Parameter	Value	Unit
P	Peak Pulse Power, 8/20 $\mu$ s Waveshape	300	W
T <sub>J</sub>	Operating Temperature	-55 to +125	°C
T <sub>STG</sub>	Storage Temperature	-55 to +150	°C
T <sub>L</sub>	Lead Soldering Temperature	260 (10 Sec.)	°C

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**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
S16LCC03-8	3.3	4	7	200	25	-5
S16LCC05-8	5.0	6	9.8	20	25	1
S16LCC12-8	12.0	13.3	19	1	25	8
S16LCC15-8	15.0	16.7	24	1	25	11
S16LCC24-8	24.0	26.7	43	1	25	28

**PACKAGE OUTLINES & DIMENSIONS**



DIM	INCHES		MILLIMETERS	
	MIN.	MAX	MIN.	MAX.
A	0.358	0.398	9.09	10.10
B	0.150	0.157	3.8	4.0
C	0.053	0.069	1.35	1.75
D	0.011	0.021	0.28	0.53
F	0.016	0.050	0.41	1.27
G	0.050 BSC		1.27 BSC	
J	0.006	0.010	0.15	0.25
K	0.004	0.008	0.10	0.20
L	0.189	0.206	4.80	5.23
P	0.228	0.244	5.79	6.19

**TYPICAL CHARACTERISTICS**

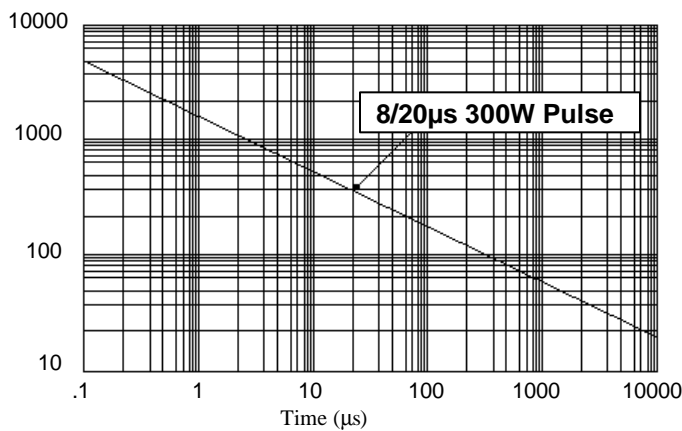


Figure 1. Peak Pulse Power Vs Pulse Time (ms)

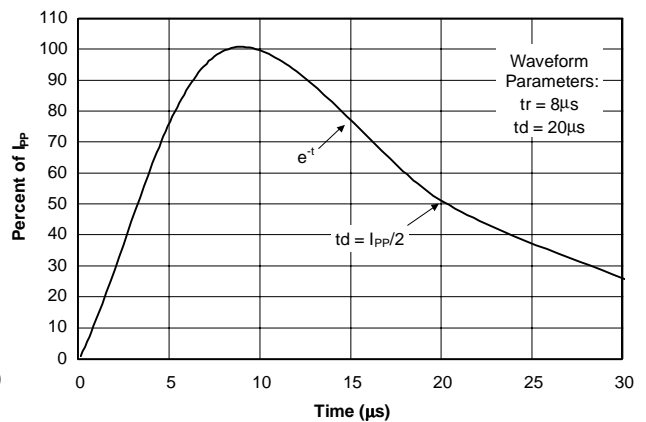


Figure 2. Pulse Wave Form

**TECHNICAL DATA**

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