

Green Products

TVS ARRAY SERIES

FEATURES

- ✓ Protects 3.3, 5, 12, 15, 24 V Components
- ✓ Unidirectional
- ✓ Low Capacitance 25 pF
- ✓ Provides Electrically Isolated Protection
- √ 300 W @ 8/20 µs
- ✓ Protects 8 Lines
- ✓ SO-16 Packaging
- √ This is a Pb Free Device
- ✓ All SMC parts are traceable to the wafer lot
- ✓ Additional testing can be offered upon request

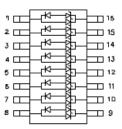
SO-16



DESCRIPTION

The S16LCXX-8 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), lightning and other voltage-induced transient events. The device can be used to protect combinations of 8 unidirectional lines up to 24 volts.

SCHEMATIC & PIN CONFIGURATION



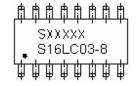
APPLICATION

- ✓ 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
- ✓ PIN #1 Indicator: DOT on top of package
- Packaging: Tubes or Tape & Reel per EIA Standard 481

MARKING DIAGRAM



Where XXXXX is YYWWL

S16LC03-8 = Part Name

S = S YY = Year WW = Week L = Lot Number

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

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Ordering Information:

Device	Package	Shipping
S16LC03-8 THRU S16LC24-8	SO-16 (Pb-Free)	2500pcs / 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		
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		

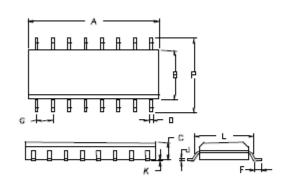
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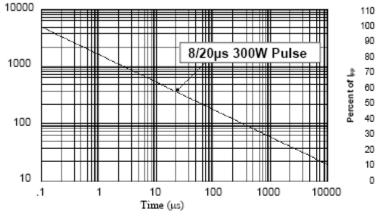
ELECTRICAL CHARACTERISTICS @ 25 °C						
Part Number	Stand-off	Breakdown	Clamping	Leakage	Capacitance	Temperature
	Voltage	Voltage	Voltage	Current	(f = 1MHz)	Coefficient
		V_{BR}	V _c	I _R	C	of V _{BR}
	V_{wm}	@1mA	@ 1 A	@ V _{wm}	@ 0V	a(V _{BR})
	(v)	(V)	(V)	(μA)	(pF)	mv/°C
	Max	Min	Max	Max	Max	Max
S16LC03-8	3.3	4	7	200	25	-5
S16LC05-8	5.0	6	9.8	20	25	1
S16LC12-8	12.0	13.3	19	1	25	8
S16LC15-8	15.0	16.7	24	1	25	11
S16LC24-8	24.0	26.7	43	1	25	28

PACKAGE OUTLINES & DEMENSIONS



	INCI	HES	MILLIMETERS	
DIM	MIN.	MAX	MIN.	MAX.
A	0.358	0.398	9.09	10.10
В	0.150	0.157	3.8	4.0
С	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



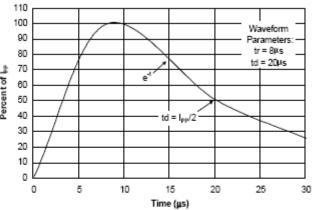


Figure 1. Peak Pulse Power Vs Pulse Time (µs)

Figure 2. Pulse Wave Form

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