S8LC03-2-G thru S8LC24-2-G

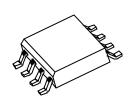
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**Green Products** 

## **TVS ARRAY SERIES**

## **FEATURES**

- ✓ Protects 3.3, 5, 12, 15, 24 V Components
- ✓ Unidirectional
- ✓ Low Capacitance 5 pF
- ✓ Provides Electrically Isolated Protection
- √ 500 W @ 8/20 µs
- ✓ Protects 2 Lines
- √ SO-8 Packaging
- ✓ Green Products in Compliance with the RoHS Directive

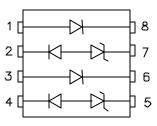


## **DESCRIPTION**

The S8LCXX-2-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), lightning and other voltage-induced transient events. The device can be used to protect up to 2 unidirectional lines.

## **SCHEMATIC & PIN CONFIGURATION**

SO-8



## **APPLICATION**

- ✓ 10/100 Base T Ethernet
- ✓ USB
- ✓ Cellular Phone Terminals
- ✓ Audio/Video Inputs
- ✓ xDSL Interfaces

## **MECHANICAL CHARACTERISTICS**

- ✓ SO-8 Surface Mount Package
- ✓ Approximate Weight: 0.1 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**

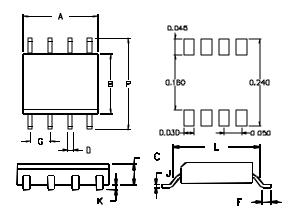
Symbol	Parameter	Value	Unit
Р	Peak Pulse Power, 8/20 μs Waveshape	500	W
$T_J$	Operating Temperature	-55 to +125	°C
$T_{STG}$	Storage Temperature	-55 to +150	°C
Τι	Lead Soldering Temperature	260 (10 Sec.)	$^{\circ}\mathrm{C}$

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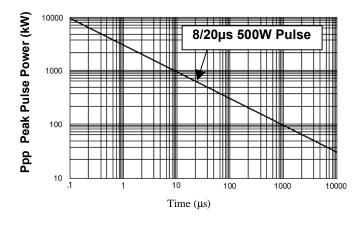
ELECTRICAL CHARACTERISTICS @ 25 °C								
Part Number	Stand-off	Breakdown	Clamping	Leakage	Capacitance	Temperature		
	Voltage	Voltage	Voltage	Current	(f = 1MHz)	Coefficient		
		$V_{BR}$	$V_c$	$I_R$	С	of $V_{BR}$		
	$V_{wm}$	@1mA	@ 1 A	@ V <sub>wm</sub>	@ 0V	a(V <sub>BR</sub> )		
	(v)	(V)	(V)	(μA)	(pF)	mv/°C		
	Max	Min	Max	Max	Max	Max		
S8LC03-2-G	3.3	4	8	200	5	-5		
S8LC05-2-G	5.0	6	10.8	20	5	1 1		
S8LC12-2-G	12.0	13.3	19	1	5	8		
S8LC15-2-G	15.0	16.7	24	1	5	11		
S8LC24-2-G	24.0	26.7	43	1	5	28		

#### **PACKAGE OUTLINES & DEMENSIONS**



	INC	HES	MILLIMETERS		
DIM	MIN.	MAX	MIN.	MAX.	
A	0.189	0.196	4.8	5.0	
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**



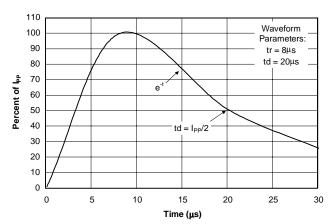


Figure 1. Peak Pulse Power Vs Pulse Time (ms)

Figure 2. Pulse Wave Form



S8LC03-2-G thru S8LC24-2-G

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