

Green Products

TVS ARRAY SERIES

FEATURES

- Protects 3.3, 5, 12, 15, 24 V Components
- ✓ Unidirectional
- ✓ Provides Electrically Isolated Protection
- √ 300 W @ 8/20 μs
- ✓ Protects 4 Lines
- ✓ SO-8 Packaging
- ✓ This is a Pb Free Device
- All SMC parts are traceable to the wafer lot
- ✓ Additional testing can be offered upon request

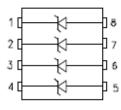
SO-8



DESCRIPTION

The SMDAXX 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 four unidirectional lines.

SCHEMATIC & PIN CONFIGURATION



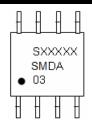
APPLICATION

- ✓ RS-232 Data Lines
- ✓ Microprocessor Based Equipment
- ✓ Notebooks, Desktops, & Servers
- ✓ LAN/WAN Equipment
- ✓ Serial and Parallel Port
- ✓ Peripherals

MECHANICAL CHARACTERISTICS

- ✓ SO-8 Surface Mount Package
- ✓ Approximate Weight: 0.1 grams
- ✓ PIN #1 Indicator: DOT on top of package
- Packaging: Tubes or Tape & Reel per EIA Standard 481

MARKING DIAGRAM



Cautions: Molding resin

Epoxy resin UL:94V-0

Where XXXXX is YYWWL

SMDA03 = Part Name

S = S YY = Year WW = Week

L = Lot Number

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Ordering Information:

Device	Package	Shipping
SMDA03 THRU SMDA24	SO-8 (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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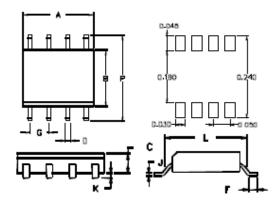
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ELECTRICAL CHARACTERISTICS @ 25 °C						
Part Number	Stand-off	Breakdown	Clamping	Leakage	Capacitance	Temperature
	Voltage	Voltage	Voltage	Current	(f = 1MHz)	Coefficient
		V_{BR}	V _c	I _R	С	of V _{BR}
	V_{wm}	@1mA	@ 1 A	@ V _{wm}	@ 0V	a(V _{BR})
	(v)	(V)	(V)	(μA)	(pF)	mv/°C
	Max	Min	Max	Max	Max	Max
SMDA03	3.3	4	7	200	800	-3
SMDA05	5.0	6	9.8	20	600	3
SMDA12	12.0	13.3	19	1	185	10
SMDA15	15.0	16.7	24	1	140	13
SMDA24	24.0	26.7	43	1	90	30

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

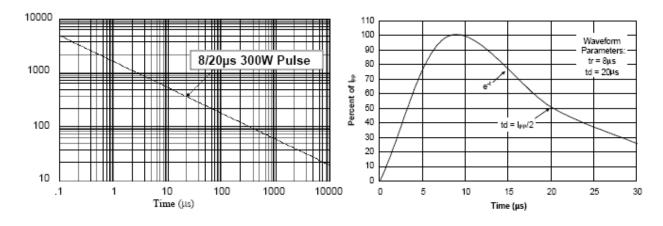


Figure 1. Peak Pulse Power Vs Pulse Time (μ s)

Figure 2. Pulse Wave Form

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