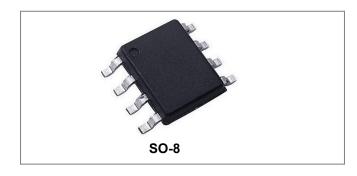






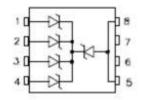
### SMDA03C-4 THRU SMDA36C-4 TVS ARRAY SERIES



### **Description**

The SMDAXXC-4 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 four bidirectional lines.

## **Schematic & Pin Configuration**



### **Features**

- Protects 3.3, 5, 12, 15, 24, 36 V Components
- Bidirectional
- Provides Electrically Isolated Protection
- 300 W @ 8/20 us
- 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

#### **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

#### **Application**

- Network Interfaces
- Portable Electronics
- Cellular Phone Terminals
- Audio/Video Inputs
- I/O Transceivers

### **Absolute Maximum Ratings:**

Parameter	Symbol	Value	Units
Peak Pulse Power, 8/20 µs Wave shape	Р	300	w
Operating Temperature	TJ	-55 to +125	°C
Storage Temperature	T <sub>stg</sub>	-55 to +150	°C
Lead Soldering Temperature	T∟	260 (10 Sec.)	°C

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## Electrical Characteristics@25°C

Part Number	Stand-off Voltage Vwm (V) Max	Breakdown Voltage V <sub>BR</sub> @1mA (V) Min	Clamping Voltage Vc @ 1 A (V) Max	Leakage Current I <sub>R</sub> @ Vwm (uA) Max	Capacitance (f = 1MHz) C @ 0V (pF) Max	Temperature Coefficient of V <sub>BR</sub> a(V <sub>BR)</sub> mv/°C Max
SMDA03C-4	3.3	4	7	200	300	-5
SMDA05C-4	5.0	6	9.8	40	200	3
SMDA12C-4	12.0	13.3	19	1	185	10
SMDA15C-4	15.0	16.7	24	1	140	13
SMDA24C-4	24.0	26.7	43	1	90	30
SMDA36C-4	36.0	40	60	1	25	-

## **Ratings and Characteristics Curves**

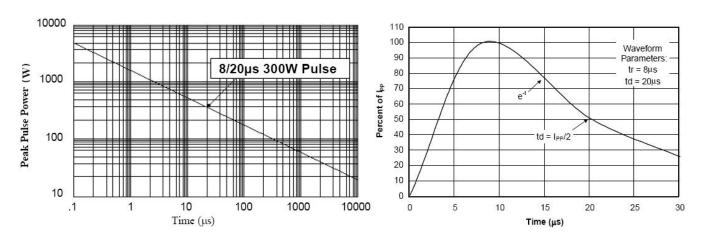


Figure 1. Peak Pulse Power Vs Pulse Time (µs)

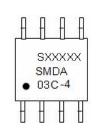
Figure 2. Pulse Wave Form

## **Ordering Information**

Device	Package	Shipping	
SMDA03C-4 THRU SMDA36C-4	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.

### **Marking Diagram**



Where XXXXX is YYWWL

 SMDA03C-4
 = Part Number

 S
 = S

 YY
 = Year

 WW
 = Week

 L
 = Lot Number

Cautions: Molding resin

Epoxy resin UL:94V-0

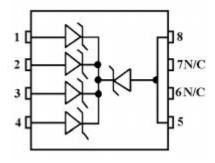
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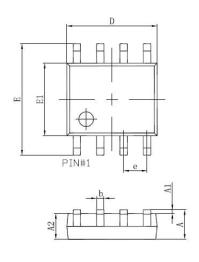


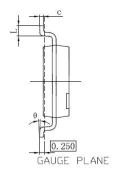


## **Circuit Diagram**



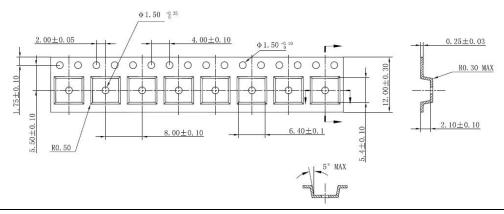
## **Mechanical Dimensions SO-8**





OVMDOL	Millimeters		Inches	
SYMBOL	MIN.	MAX.	MIN.	MAX.
Α	1.350	1.800	0.053	0.071
A1	0.100	0.250	0.004	0.010
A2	1.350	1.750	0.053	0.069
b	0.306	0.510	0.012	0.020
С	0.150	0.300	0.006	0.012
D	4.720	5.120	0.186	0.202
е	1.140	1.400	0.045	0.055
E	5.700	6.300	0.224	0.248
E1	3.750	4.150	0.148	0.163
L	0.300	1.270	0.012	0.050
θ	0°	8°	0°	8°

## **Carrier Tape Specification SO-8**



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11DQ04TR 11DQ05TA 11DQ06TA 11DQ09TA 11DQ10TA 120SPC045A 120SPC060A 121SPC045A 121SPC060A 122SPC030A

123SPC080A 123SPC100A 12CTQ030 12CTQ035 12CTQ040 12CTQ045 12TQ045 12TQ100 12TQ150 15KPA200ATR 15MQ040NTR

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