

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China









8700 E. Thomas Road Scottsdale, AZ 85251 Tel: (480) 941-6300 Fax: (480) 947-1503

SMDA03-6 thru SMDA24-6

TVSarray™ Series



DESCRIPTION (300 watt)

This TRANSIENT VOLTAGE SUPPRESSOR (TVS) array is packaged in an SO-8 configuration giving protection to 6 Unidirectional data or interface lines. It is designed for use in applications where protection can be provided at the board level from voltage transients caused by electrostatic discharge (ESD) as defined in IEC 1000-4-2, electrical fast transients (EFT) per IEC 1000-4-4 and effects of secondary lighting.

These TVS arrays have a peak power rating of 300 watts for an 8/20µsec pulse. This array is suitable for protection of sensitive circuitry consisting of TTL, CMOS DRAM's, SRAM's, HCMOS, HSIC microprocessors, and I/O transceivers. The SMDAXX-6 product provides board level protection from static electricity and other induced voltage surges that can damage sensitive circuitry.

FEATURES

- Protects up to 6 Unidirectional lines
- Surge protection Per IEC 1000-4-2, IEC 1000-4-4
- SO-8 Packaging

- Molded SO-8 Surface Mount Weight: 0.066 grams (approximate)
- Marking: Logo, device number, date code
- Pin #1 defined by DOT on top of package

MAXIMUM RATINGS

- Operating Temperatures: -55°C to +150°C Storage Temperature: -55°C to +150°C
- Peak Pulse Power: 300 Watts (8/20 µsec, Figure 1)
- Pulse Repetition Rate: <.01%

PACKAGING

MECHANICAL

- Tape & Reel EIA Standard 481-1-A
- 13 inch reel 2,500, pieces (OPTIONAL)
- Carrier tubes 95 pcs per (STANDARD)

ELECTRICAL CHARACTERISTICS PER LINE @ 25°C Unless otherwise specified

PART NUMBER	DEVICE MARKING	STAND OFF VOLTAGE V _{WM} VOLTS	BREAKDOWN VOLTAGE V _{BR} @1 mA VOLTS	CLAMPING VOLTAGE V _C @ 1 Amp (FIGURE 2) VOLTS	CLAMPING VOLTAGE V _C @ 5 Amp (FIGURE 2) VOLTS	LEAKAGE CURRENT I _D @ V _{WM} μΑ	CAPACITANCE (f=1 MHz) @0V C pF	TEMPERATURE COEFFICIENT OF V _{BR} á _{VBR} mV/°C
		MAX	MIN	MAX	MAX	MAX	TYP	MAX
SMDA03-6	SDK6	3.3	4	7	9	200	800	-3
SMDA05-6	SDA6	5.0	6.0	9.8	11	20	550	3
SMDA12-6	SDC6	12.0	13.3	19.0	24	1	185	10
SMDA15-6	SDE6	15.0	16.7	24.0	30	1	140	13
SMDA24-6	SDG6	24.0	26.7	43.0	55	1	88	30

NOTE: TVS product is normally selected based on its stand off Voltage V_{WM}. Product selected voltage should be equal to or greater than the continuous peak operating voltage of the circuit to be protected.

Application: The SMDAXX-6 product is designed for transient voltage suppression protection of ESD sensitive components at the board level. It is an ideal product to be used for protection of I/O Transceivers.

SMDA03-6 thru SMDA24-6

WAVE FORMS

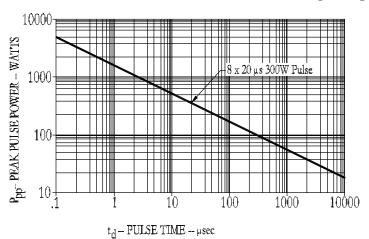


FIGURE 1
Peak Pulse Power Vs Pulse Time

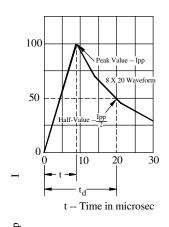
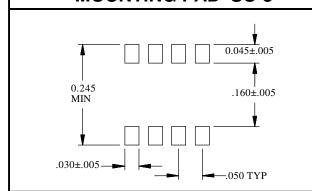
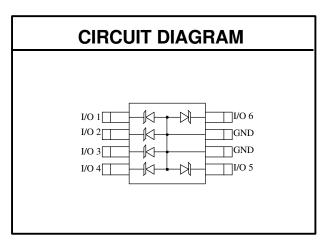


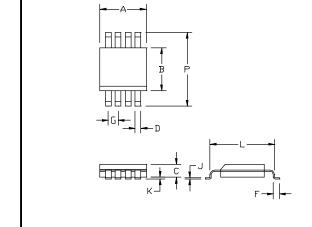
FIGURE 2 Pulse Wave Form

MOUNTING PAD SO-8





SO-8 PACKAGE



	INCI	HES	MILLIMETERS		
DIM	MIN	MAX	MIN	MAX	
A	0.188	0.197	4.77	5.00	
В	0.150	0.158	3.81	4.01	
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 B	SC	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	