



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!



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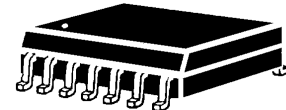


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SMDA03C-8
 thru
SMDA24C-8
 TVSarray™ Series

DESCRIPTION (300 watt)

This 14 pin 8 line Bi-directional array is designed for use in applications where protection is required 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 TRANSIENT VOLTAGE SUPPRESSOR (TVS) Diode Arrays have a peak power of 300 watts for an 8/20 μ sec pulse and are designed to protect 3.0/3.3 volt components such as DRAM's, SRAM's, CMOS, HCMOS, HSIC, and low voltage interfaces up to 24 volts.

FEATURES

- Protects 3.0/3.3 up through 24V Components
- Protects 8 lines Bi-directional
- Provides electrically isolated protection
- SO-14 Packaging

MECHANICAL

- Molded SO-14 Surface Mount
- Weight: 0.127 grams (approximate)
- Body Marked with Logo, and device number
- Pin #1 defined by DOT on top of package
- Encapsulation meets UL 94V-0

MAXIMUM RATINGS

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

PACKAGING

- Tape & Reel EIA Standard 481-1-A
- 13 inch reel 2,500 (OPTIONAL)
- Carrier tubes 55 pcs per (STANDARD)

ELECTRICAL CHARACTERISTICS@ 25°C Unless otherwise specified

PART NUMBER	DEVICE MARKING	STAND OFF VOLTAGE V_{WM}	BREAKDOWN VOLTAGE V_{BR} @1 mA	CLAMPING VOLTAGE V_C @ 1 Amp (FIGURE 2)	CLAMPING VOLTAGE V_C @ 5 Amp (FIGURE 2)	LEAKAGE CURRENT I_b @ V_{WM}	CAPACITANCE (f=1 MHz) @0V C	TEMPERATURE COEFFICIENT OF V_{BR} $\frac{\Delta V_{BR}}{V_{BR}} \frac{\Delta T}{mV/^\circ C}$
		VOLTS	VOLTS	VOLTS	VOLTS	μA	pF	
		MAX	MIN	MAX	MAX	MAX	TYP	MAX
SMDA03C-8	SDL8	3.3	4	7.0	9.0	200	300	-5
SMDA05C-8	SDB8	5.0	6.0	9.8	11	40	200	1
SMDA12C-8	SDD8	12.0	13.3	19.0	24	1	75	8
SMDA15C-8	SDF8	15.0	16.7	24.0	30	1	50	11
SMDA24C-8	SDH8	24.0	26.7	43.0	55	1	35	28

NOTE: Transient Voltage Suppression (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 SMDAXXC-8 product is designed for transient voltage suppression protection of components at the board level. It is an ideal product to be used for protection of I/O Transceivers.

WAVE FORMS

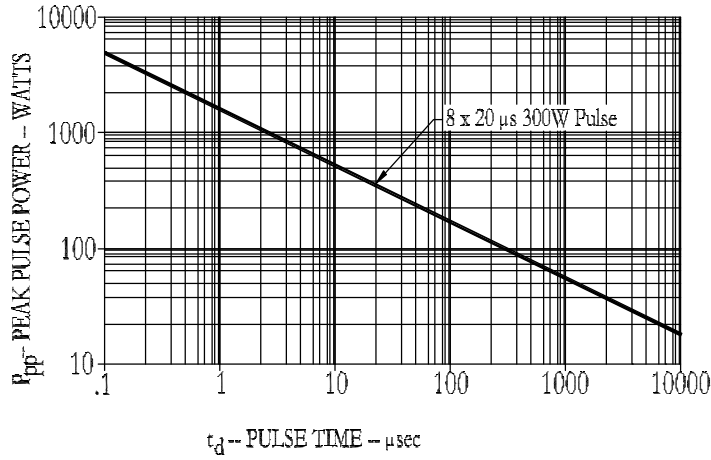


FIGURE 1
Peak Pulse Power Vs Pulse Time

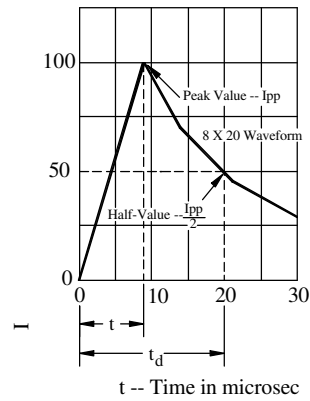


FIGURE 2
Pulse Wave Form

