SENSITRON SEMICONDUCTOR

TECHNICAL DATA DATA SHEET 4601, REV. -

SMDA03C-G thru SMDA24C-G

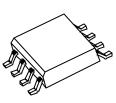
Green Products

FEATURES

- Protects 3.3, 5, 12, 15, 24 V Components
- ✓ Bidirectional
- ✓ Provides Electrically Isolated Protection
- ✓ 300 W @ 8/20 μs
- ✓ Protects 4 Lines
- ✓ SO-8 Packaging
- ✓ Green Products in Compliance with the RoHS Directive

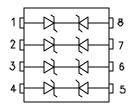
DESCRIPTION

The SMDAXXC-G 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

SO-8



APPLICATION

- ✓ RS-232 & RS-422 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
- ✓ Makring: Device number, Date code, & Logo
- ✓ PIN #1 Indicator: DOT on top of package
- ✓ Packaging: Tubes or Tape & Reel per EIA Standard 481

ŀ	ABSOLUTE	MAXIMUM RATINGS			
	Symbol	Parameter	Value	Unit	
	Р	Peak Pulse Power, 8/20 μs Waveshape	300	W	
	TJ	Operating Temperature	-55 to +125	°C	
	T _{STG}	Storage Temperature	-55 to +150	°C	
	TL	Lead Soldering Temperature	260 (10 Sec.)	°C	

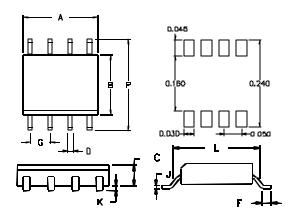
TVS ARRAY SERIES

Green Products

TECHNICAL DATA DATA SHEET 4601, REV. -

ELECTRICAL CHARACTERISTICS @ 25 °C								
Part Number	Stand-off	Breakdown	Clamping	Leakage	Capacitance	Temperature		
	Voltage	Voltage	Voltage	Current	(f = 1MHz)	Coefficient		
		V _{BR}	Vc	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		
SMDA03C-G	3.3	4	7	200	400	-5		
SMDA05C-G	5.0	6	9.8	40	300	1		
SMDA12C-G	12.0	13.3	19	1	94	8		
SMDA15C-G	15.0	16.7	24	1	70	11		
SMDA24C-G	24.0	26.7	43	1	45	28		

PACKAGE OUTLINES & DEMENSIONS



	INC	HES	MILLIMETERS		
DIM	MIN.	MAX	MIN.	MAX.	
А	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	
Р	0.228	0.244	5.79	6.19	

TYPICAL CHARACTERISTICS

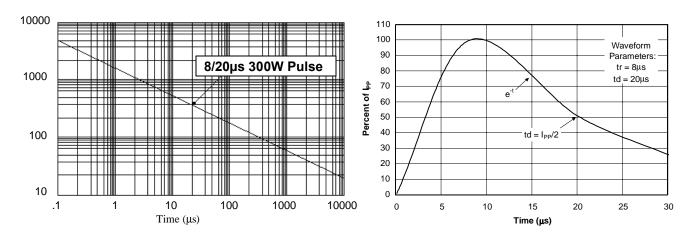




Figure 2. Pulse Wave Form

 221 West Industry Court • Deer Park, NY 11729-4681 • Phone (631) 586-7600 • Fax (631) 242-9798 • World Wide Web Site - http://www.sensitron.com • E-Mail Address - sales@sensitron.com •

Downloaded from **Elcodis.com** electronic components distributor

SENSITRON SEMICONDUCTOR

TECHNICAL DATA DATA SHEET 4601, REV. -

SMDA03C-G thru SMDA24C-G

Green Products

DISCLAIMER:

1- The information given herein, including the specifications and dimensions, is subject to change without prior not ice to improve product characteristics. Before ordering, purchasers are advised to contact the Sensitron Semiconductor sales department for the latest version of the datasheet(s).

2- In cases where extremely high reliability is required (such as use in nuclear power control, aerospace and aviation, traffic equipment, medical equipment, and safety equipment), safety should be ensured by using semiconductor devices that feature assured safety or by means of users' fail-safe precautions or other arrangement.

3- In no event shall Sensitron Semiconductor be liable for any damages that may result from an accident or any other cause during operation of the user's units according to the datasheet(s). Sensitron Semiconductor assumes no responsibility for any intellectual property claims or any other problems that may result from applications of information, products or circuits described in the datasheets.

4- In no event shall Sensitron Semiconductor be liable for any failure in a semiconductor device or any secondary damage resulting from use at a value exceeding the absolute maximum rating.

5- No license is granted by the datasheet(s) under any patents or other rights of any third party or Sensitron Semiconductor.

6- The datasheet(s) may not be reproduced or duplicated, in any form, in whole or part, without the expressed written permission of Sensitron Semiconductor.

.7- The products (technologies) described in the datasheet(s) are not to be provided to any party whose purpose in their application will hinder maintenance of international peace and safety nor are they to be applied to that purpose by their direct purchasers or any third party. When exporting these products (technologies), the necessary procedures are to be taken in accordance with related laws and regulations.