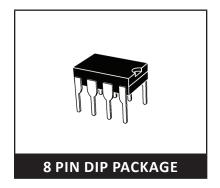
HIGH POWERED MULTI-LINE TVS ARRAY



DESCRIPTION

The DA8 Series are high powered multi-line TVS arrays available in a 8 pin DIP package. This series is designed to protect monitoring and industrial equipment from the damaging effects of ESD, EFT and secondary transient threats.

The DA8 Series has a peak pulse power rating of 800 Watts for an $8/20\mu s$ waveshape. This devices meets the IEC 61000-4-2, IEC 61000-4-4 and IEC 61000-4-5 requirements.

FEATURES

- IEC Compatibility IEC 61000-4-2 (ESD): Air 15kV, Contact 8kV
- IEC Compatibility IEC 61000-4-4 (EFT): 40A 5/50ns
- IEC Compatibility IEC 61000-4-5 (Surge): 24A, 8/20μs Level 2(Line-Gnd) & Level 3(Line-Line)
- 800 Watts Peak Pulse Power per Line (tp = 8/20μs)
- Unidirectional & Bidirectional Configurations
- ESD Protection > 25 kilovolts
- · Available in Multiple Voltages
- Protects 4 to 6 Lines
- · RoHS Compliant
- REACH Compliant

APPLICATIONS

- Low Frequency I/O Ports
- RS-232 & RS-423 Data Lines
- Power Bus Lines
- Monitoring & Industrial Signal & Data Ports
- Microprocessor Based Equipment

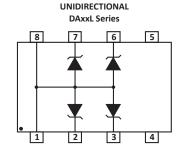
MECHANICAL CHARACTERISTICS

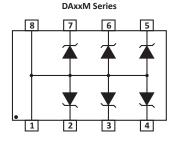
- Molded 8 Pin Dual-In-Line (DIP) Package
- Approximate Weight: 0.55 grams
- Lead-Free Pure-Tin Plating (Annealed)
- Solder Reflow Temperature:

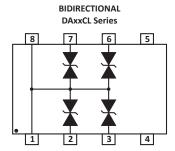
Pure-Tin - Sn, 100: 260-270°C

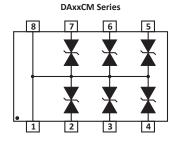
• Flammability Rating UL 94V-0

PIN CONFIGURATIONS











TYPICAL DEVICE CHARACTERISTICS

MAXIMUM RATINGS @ 25°C Unless Otherwise Specified					
PARAMETER	SYMBOL	VALUE	UNITS		
Peak Pulse Power (tp = 8/20μs) - See Figure 1	P _{pp}	800	Watts		
Operating Temperature	T _L	-55 to 150	°C		
Storage Temperature	T _{stg}	-55 to 150	°C		
Forward Surge Rating	I _F	10	Amps		

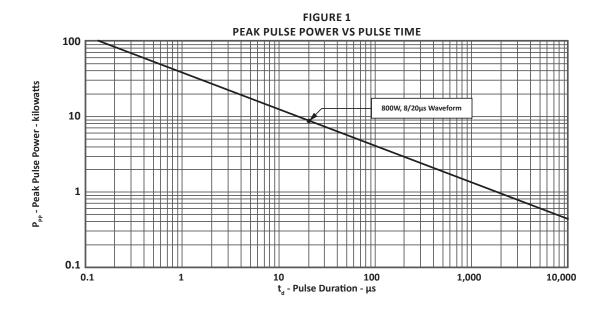
ELECTRICAL CHARACTERISTICS PER LINE @ 25°C Unless Otherwise Specified						
PART NUMBER (Note 1)	RATED STAND-OFF VOLTAGE	MINIMUM BREAKDOWN VOLTAGE	MAXIMUM CLAMPING VOLTAGE (Fig. 2)	MAXIMUM CLAMPING VOLTAGE (Fig. 2)	MAXIMUM LEAKAGE CURRENT	TYPICAL CAPACITANCE
	V _{WM} VOLTS	@1mA V _(BR) VOLTS	@ IP = 10A V _c VOLTS	@ 8/20μs V _c @ Ι _{թթ}	@V _{wм} Ι _D μΑ	@0V, 1MHz C pF
DA05L	5.0	6.0	12.5	24.6V @ 45.0A	200	880
DA05M	5.0	6.0	12.5	24.6V @ 45.0A	200	880
DA05CL	5.0	6.0	12.5	24.6V @ 45.0A	200	500
DA05CM	5.0	6.0	12.5	24.6V @ 45.0A	200	500
DA12L	12.0	13.3	26.0	32.9V @ 34.0A	2	440
DA12M	12.0	13.3	26.0	32.9V @ 34.0A	2	440
DA12CL	12.0	13.3	26.0	32.9V @ 34.0A	2	385
DA12CM	12.0	13.3	26.0	32.9V @ 34.0A	2	385
DA15L	15.0	16.7	33.0	37.7V @ 27.0A	2	400
DA15M	15.0	16.7	33.0	37.7V @ 27.0A	2	400
DA15CL	15.0	16.7	33.0	37.7V @ 27.0A	2	300
DA15CM	15.0	16.7	33.0	37.7V @ 27.0A	2	300
DA24L	24.0	26.7	52.1	53.0V @ 20.0A	2	275
DA24M	24.0	26.7	52.1	53.0V @ 20.0A	2	275
DA24CL	24.0	26.7	52.1	53.0V @ 20.0A	2	200
DA24CM	24.0	26.7	52.1	53.0V @ 20.0A	2	200

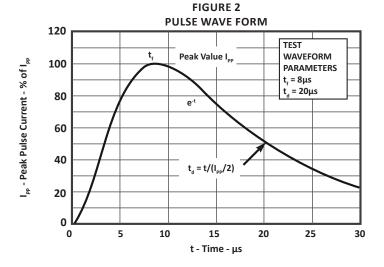
NOTES

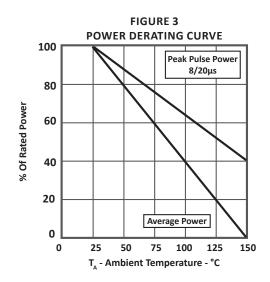
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^{1.} The "C" suffix denotes a bidirectional device, such as DA05 $\underline{\textbf{C}}$ L.

TYPICAL DEVICE CHARACTERISTICS





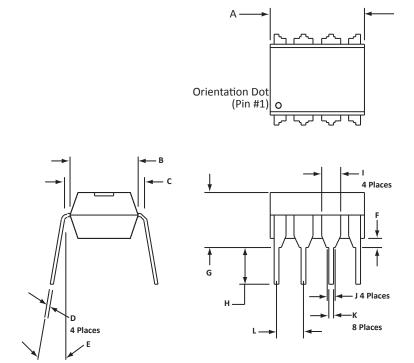


8 PIN DIP PACKAGE INFORMATION

OUTLINE DIMENSIONS					
DIM	MILLIMETERS		INCHES		
	MIN	MAX	MIN	MAX	
Α	9.4	10.2	0.370	0.400	
В	6.10	6.60	0.240	0.260	
С	7.62	8.26	0.300	0.325	
D	0.20	0.30	0.008	0.012	
Е	0°	10°	0°	10°	
F	0.38	0.51	0.015	0.020	
G	4.80	5.08	0.189	0.200	
Н	2.92	3.43	0.115	0.135	
I	1.02	1.78	0.040	0.070	
J	0.84	0.84	0.033	0.033	
К	0.38	0.53	0.015	0.021	
L	2.54	2.54	0.100	0.100	

NOTES

- 1. Dimensions are exclusive of mold flash and metal burrs.
- 2. Dimensions "J" and "L" are between centers.



ORDERING INFORMATION					
BASE PART NUMBER (xx = Voltage)	LEADFREE SUFFIX	TAPE SUFFIX	QTY/REEL	REEL SIZE	TUBE QTY
DAxxL	-LF	n/a	n/a	n/a	50
DAxxM	-LF	n/a	n/a	n/a	50
DAxxCL	-LF	n/a	n/a	n/a	50
DAxxCM	-LF	n/a	n/a	n/a	50

NOTES

 $1. \ \ Marking \ on \ Part \ - logo, \ part \ number, \ date \ code \ and \ pin \ one \ defined \ by \ dot \ on \ top \ of \ package.$

Package outline per document number 06004.R2 9/09.



COMPANY INFORMATION

COMPANY PROFILE

ProTek Devices, based in Tempe, Arizona USA, is a manufacturer of Transient Voltage Suppression (TVS) products designed specifically for the protection of electronic systems from the effects of lightning, Electrostatic Discharge (ESD), Nuclear Electromagnetic Pulse (NEMP), inductive switching and EMI/RFI. With over 25 years of engineering and manufacturing experience, ProTek designs TVS devices that provide application specific protection solutions for all electronic equipment/systems.

ProTek Devices Analog Products Division, also manufactures analog interface, control, RF and power management products.

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