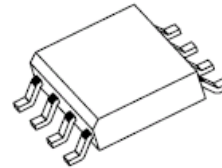


FEATURES

- ✓ Protects 3.3, 5, 12, 15, 24 V Components
- ✓ Bidirectional
- ✓ Low capacitance for high-speed data lines
- ✓ 300 W @ 8/20 μs
- ✓ Protects 2 I/O Lines
- ✓ Low leakage current
- ✓ SO-8 Packaging
- ✓ Solid-state silicon avalanche technology
- ✓ This is a Pb - Free Device
- ✓ All SMC parts are traceable to the wafer lot
- ✓ Additional testing can be offered upon request

TVS ARRAY SERIES

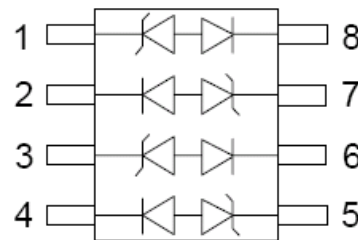
SO-8



DESCRIPTION

The LCDAXX series of TVS array are designed to protect sensitive electronics from damage or latch-up due to ESD and other voltage-induced transient events. Each device will protect two high-speed lines. they are bi-directional devices and may be used on lines where the signal polarities are above and below ground.

SCHEMATIC & PIN CONFIGURATION



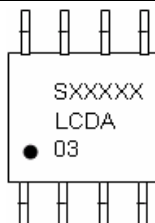
APPLICATION

- ✓ High-Speed Data Lines
- ✓ Microprocessor Based Equipment
- ✓ Universal Serial Bus (USB) Port Protection
- ✓ Notebooks, Desktops, and Servers
- ✓ Instrumentation
- ✓ LAN/WAN Equipment
- ✓ Peripherals

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

MARKING DIAGRAM



Where XXXXX is YYWWL

LCDA03 = Part Name
S = S
YY = Year
WW = Week
L = Lot Number

Cautions: Molding resin
Epoxy resin UL:94V-0

Ordering Information:

Device	Package	Shipping
LCDA03 THRU LCDA24	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.

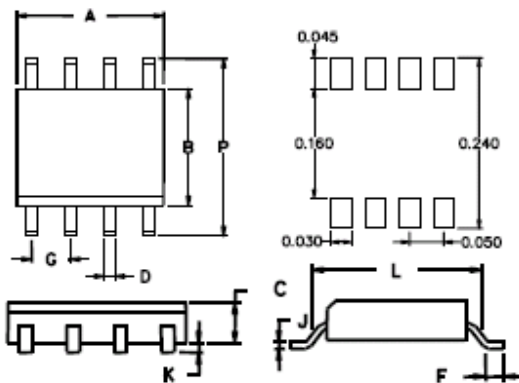
ABSOLUTE MAXIMUM RATINGS

Symbol	Parameter	Value	Unit
P	Peak Pulse Power, 8/20 μ s Waveshape	300	W
T _J	Operating Temperature	-55 to +125	°C
T _{STG}	Storage Temperature	-55 to +150	°C
T _L	Lead Soldering Temperature	260 (10 Sec.)	°C

ELECTRICAL CHARACTERISTICS @ 25 °C

Part Number	Stand-off Voltage V_{wm} (v) Max	Breakdown Voltage V_{BR} @1mA (V) Min	Clamping Voltage V_c @ 1 A (V) Max	Leakage Current I_R @ V_{wm} (μ A) Max	Capacitance (f = 1MHz) C @ 0V (pF) Max	Temperature Coefficient of V_{BR} $a(V_{BR})$ mv/°C Max
LCDA03	3.3	4	7	200	5	-5
LCDA05	5.0	6	9.8	20	5	1
LCDA12	12.0	13.3	19	1	5	8
LCDA15	15.0	16.7	24	1	5	11
LCDA24	24.0	26.7	43	1	5	28

PACKAGE OUTLINES & DEMENSIONS



DIM	INCHES		MILLIMETERS	
	MIN.	MAX	MIN.	MAX.
A	0.189	0.196	4.8	5.0
B	0.150	0.157	3.8	4.0
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 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
P	0.228	0.244	5.79	6.19

TYPICAL CHARACTERISTICS

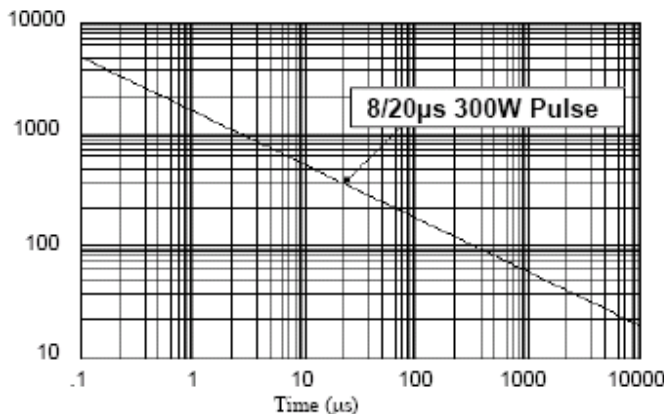


Figure 1. Peak Pulse Power Vs Pulse Time (μs)

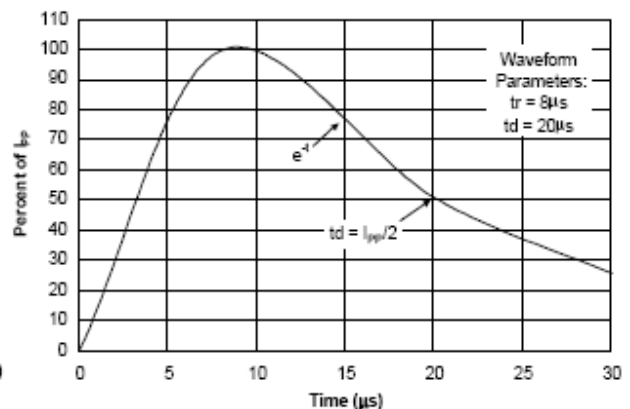


Figure 2. Pulse Wave Form



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