

LCDAXXC-8 Series

ROHS

Transient Voltage Suppressors for ESD Protection

Description

The LCDAXxC-8 series has been specifically designed to protect sensitive components which are connected to data and transmission lines from over voltages caused by electrostatic discharge (ESD), electrical fast transients (EFT), and lightning.

Features

- ◆ 500~630 Watts Peak Pulse Power per Line (tp=8/20µs)
- ◆ Protects eight I/O lines
- ◆ Low Capacitance
- ◆ Low leakage current
- ◆ IEC61000-4-2(ESD) ±15kV (air),±8kV (contact)
- ◆ IEC61000-4-4 (EFT) 40A (5/50ns)

Applications

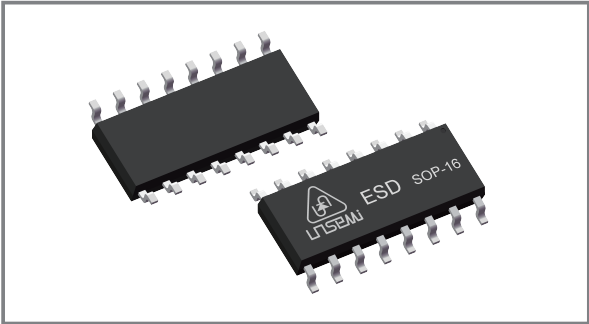
- ◆ High-Speed Data Lines
- ◆ Microprocessor Based Equipment
- ◆ Test & Measurement Equipment
- ◆ Notebooks, Desktops, and Servers
- ◆ Instrumentation
- ◆ Audio/Video Inputs
- ◆ LAN/WAN Equipment
- ◆ Peripherals

Mechanical Characteristics

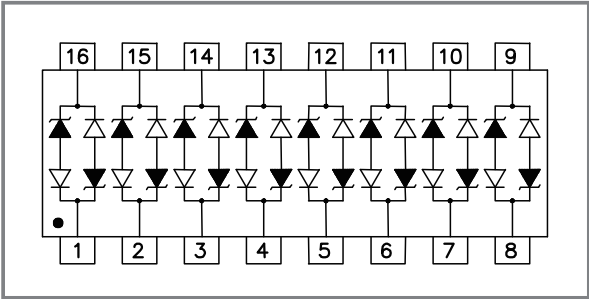
Parameter	Symbol	Value	Units
Peak Pulse Power (Tp=8/20µs waveform)	PPP	500~630	Watts
Lead Soldering Temperature	TL	260 (10 sec.)	°C
Storage Temperature Range	TSTG	-55 to +150	°C
Operating Junction Temperature Range	TJ	-40 to +125	°C



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Functional Diagram



Mechanical Data

- ◆ JEDEC SOP-16 Package
- ◆ Molding Compound Flammability Rating : UL 94V-O
- ◆ Weight 150 Milligrams (Approximate)
- ◆ Lead Finish : Lead Free

Electrical Characteristics @ 25°C Unless Otherwise Specified)

Part Number	Device Marking	Stand-Off Voltage V_{RWM} (V)	Breakdown Voltage V_{BR} (Min.) (V)	Test Current I_T (mA)	V_C @1A (Max.)	V_C		Maximum Reverse Leakage I_R @ V_{RWM} (uA)	Typ Junction Capacitance (pF)
						(Max.)	(@A)		
LCDA05C-8	LCDA05C-8	5	6	1.0	9.8	25	24	1	10
LCDA08C-8	LCDA08C-8	8	8.5	1.0	10.5	27	22	1	10
LCDA12C-8	LCDA12C-8	12	13.3	1.0	16.0	30	20	1	10
LCDA15C-8	LCDA15C-8	15	16.7	1.0	20.0	35	18	1	10
LCDA18C-8	LCDA18C-8	18	19.4	1.0	23.5	40	15	1	10
LCDA24C-8	LCDA24C-8	24	26.7	1.0	33.2	50	10	1	10

Characteristic Curves

Fig1. 8/20μs Pulse Waveform

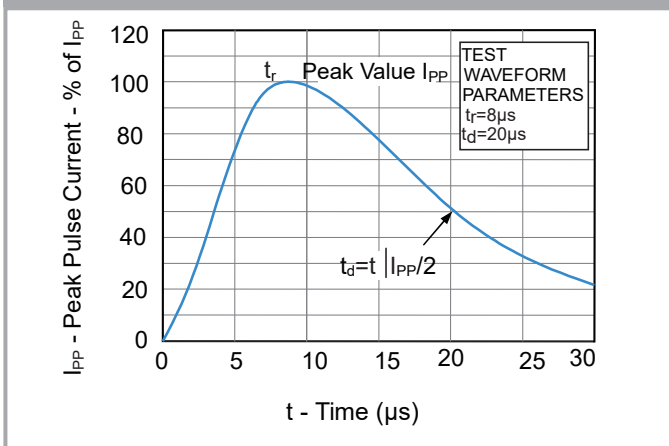


Fig2. Power Rating Derating Curve

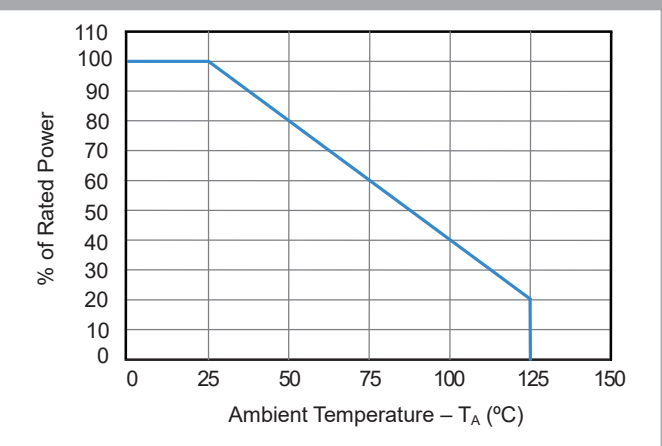
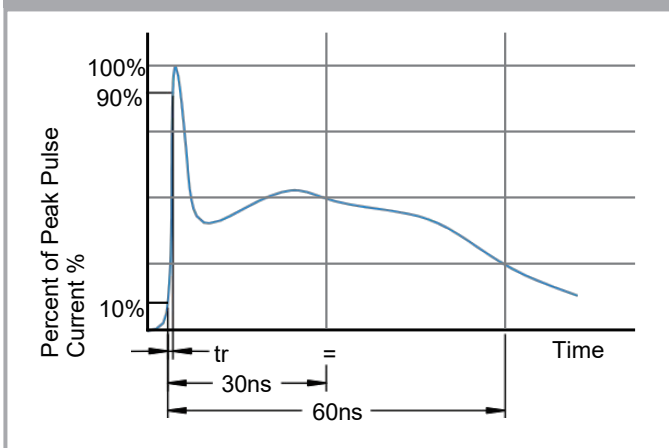
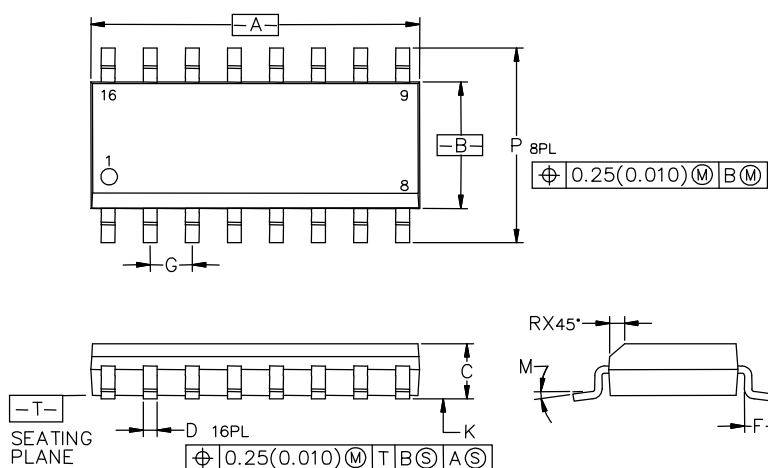


Fig3. ESD Pulse Waveform(according to IEC61000-4-2)

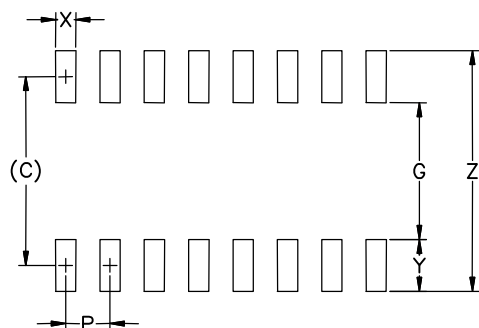


SOP-16 Package Outline & Dimensions



Symbol	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	9.80	10.0	0.386	0.393
B	3.80	4.00	0.150	0.157
C	1.35	1.75	0.054	0.068
D	0.35	0.49	0.014	0.019
F	0.40	1.25	0.016	0.049
G	1.27BSC		0.050BSC	
J	0.19	0.25	0.008	0.009
K	0.10	0.25	0.004	0.009
M	0°	7°	0°	7°
P	5.80	6.20	0.228	0.244
R	0.25	0.50	0.010	0.019

Soldering Footprint



Symbol	Inches	Millimeters
C	(0.205)	(5.20)
G	0.118	3.00
P	0.050	1.27
X	0.024	0.60
Y	0.087	2.20
Z	0.291	7.40

Ordering Information

Device	Package	Quantity	Reel Size
LCDAXXC-8 Series	SOP-16	3,000pcs/Reel	13 inch

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