

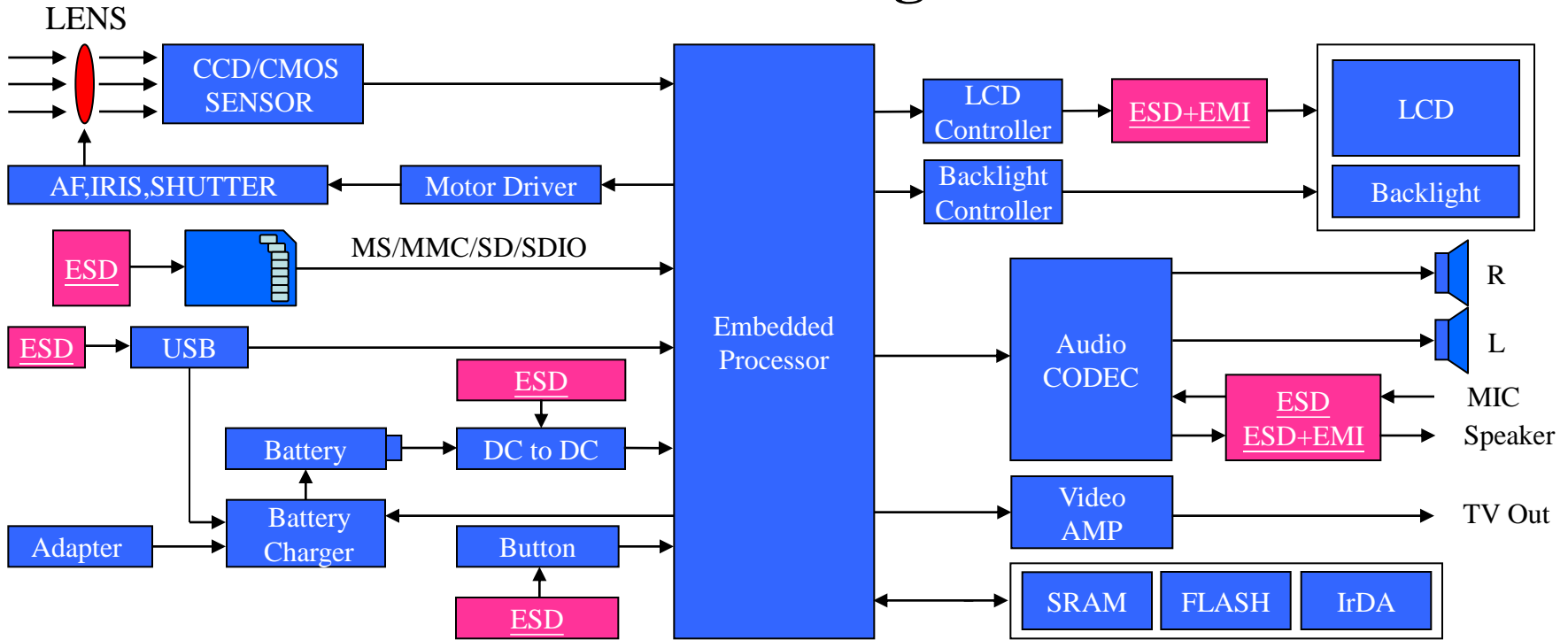
Lite-On Semiconductor DSC Platform Solutions



WORLD PRODUCTS, LLC
ELECTRONIC COMPONENT SOLUTIONS
sales@worldproducts.com || www.worldproducts.com

Exclusive agent in the America's for all Lite-On Semiconductor products.

DSC Block Diagram



- ESD**
- L03ESDL5V0CP2
 - L04ESD5V0CP2
 - L13ESD5V0CE2
 - L15ESDL5V0D6-4
 - L15ESD12VE2

- ESD+EMI Filter**
- LEF10001M8-4
 - LEF10001MC-6
 - LEF10001MG-8
 - LEF01016F6-2
 - LEF03216F6-2

LSC Product Selection Guide

Surface Mount ESD Protection Device

Part Number	Peak Power Dissipation 8x20μs	Reverse standoff voltage	Max Reverse Leakage @ VR	Max Clamping Voltage @8x20μs	Peak Pulse Current 8x20μs	Off-State Capacitance 1MHz Zero DC Bias	Package
		VR	IR	Vc	Ipp	Co	
	W	V	uA	V	A	pF	
L03ESDL5V0CP2	30	5	0.1	15	2	3.5	SOD-923
L04ESD5V0CP2	40	5	0.1	12.5	3.5	4.5 (typ)	SOD-923
L13ESD5V0CE2	130	5	0.01	14	12	45	SOD-923
L15ESDL5V0D6-4	150	5	1	19	8	3	SOT-363
L15ESD12VE2	150	12	0.05	25	6	75	SOD-882

LSC Product Selection Guide

Surface Mount ESD Protection Device with EMI Filter

Part Number	Peak Power Dissipation 8x20μs	Reverse standoff voltage	Max Reverse Leakage @ VR	Resistance	Off-State Capacitance 0MHz 2.5V DC Bias	Off-State Capacitance 1MHz Zero DC Bias	Package
		VR	IR	R	Co	Co	
	W	V	uA	Ohm	pF	pF	
LEF10001M8-4	----	5	0.5	100	11	20	SLP2116P8
LEF10001MC-6	-----	5	0.5	100	11	20	SLP3016P12
LEF10001MG-8	-----	5	0.5	100	11	20	SLP4016P16
LEF01016F6-2	----	5	5	10	----	160	SOT-563
LEF03216F6-2	-----	5	5	32	-----	160	SOT-563



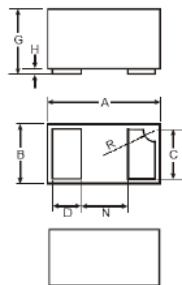
Features

- Protects One Power or I/O Line
- Max. Peak Pulse Power is 30Watts @ 8/20us
- Low Clamping Voltage
- IEC 61000-4-2, Level 4 (ESD), >±15KV by Air, >±8KV by Contact

Applications

- Computers & Peripherals
- Communication System
- Portable Electronics
- Cellular handsets and Accessories
- Notebooks & Handhelds
- Digital Cameras

Package & Dimension

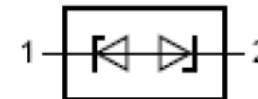


SOD-882		
DIM.	MIN.	MAX.
A	0.95	1.07
B	0.55	0.68
C	0.45	0.55
D	0.20	0.30
G	0.47	0.53
H	0.00	0.05
N	0.40 (Typ.)	
R	0.05	0.15

All Dimensions in millimeter

PIN ASSIGNMENT	
1	Cathode
2	Cathode

Layout



L04ESD5V0CP2

4.5pF Bidirectional in SOD923

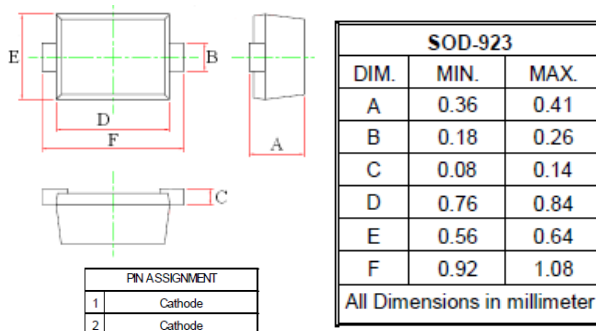
Features

- Bidirectional ESD Protection of Single Line
- Max. Peak Pulse Power is 40Watts @ 8/20us
- Low Clamping Voltage
- IEC 61000-4-2, Level 4 (ESD), >±15KV by Air, >±8KV by Contact

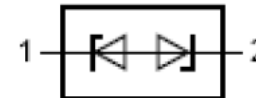
Applications

- Computers and Peripherals
- Communication System
- Portable Electronics
- Cellular handsets and Accessories
- Notebook, Desktops and Servers
- Audio & Video Equipment

Package & Dimension



Layout



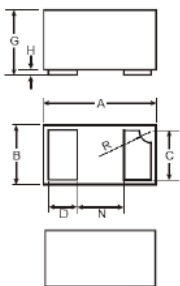
Features

- Bidirectional ESD Protection of Single Line
- Max. Peak Pulse Power is 130Watts @ 8/20us
- Low Clamping Voltage
- IEC 61000-4-2, Level 4 (ESD), >±15KV by Air, >±8KV by Contact
- IEC 61000-4-5, Level 1 (Surge), Ipp=12A @ 8/20us

Applications

- Computers and Peripherals
- Communication System
- Portable Electronics
- Notebook, Desktops and Servers
- Audio & Video Equipment

Package & Dimension

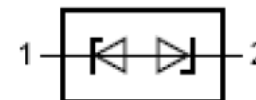


SOD-882		
DIM.	MIN.	MAX.
A	0.95	1.07
B	0.55	0.68
C	0.45	0.55
D	0.20	0.30
G	0.47	0.53
H	0.00	0.05
N	0.40 (Typ.)	
R	0.05	0.15

All Dimensions in millimeter

PIN ASSIGNMENT	
1	Cathode
2	Cathode

Layout



L15ESDL5V0D6-4

3pF 4CH ARRAY in SOT363

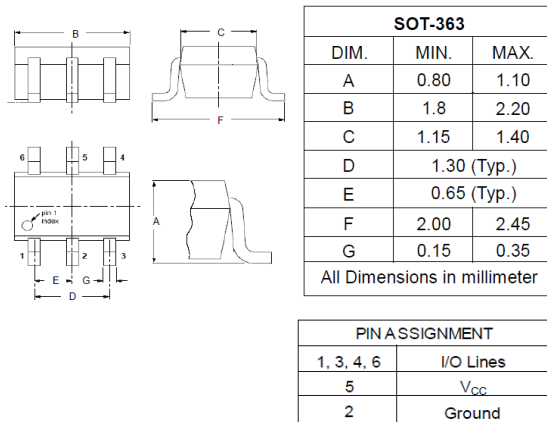
Features

- Protects Up to Four I/O Line & Power Line
- Low Capacitance <3pF for High Speed Interface
- Low Clamping Voltage
- IEC 61000-4-2, Level 4 (ESD), >±15KV by Air, >±8KV by Contact

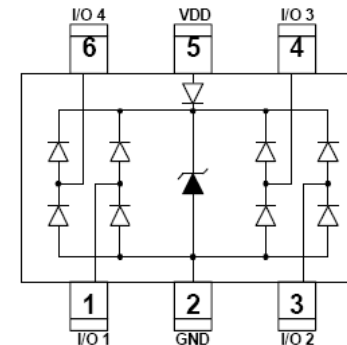
Applications

- Displays
- DVI
- USB2.0/3.0
- USB OTG
- IEEE 1394 Firewire Port
- Ethernet

Package & Dimension



Layout



L15ESD12VE2

150W 12V Directional in SOD882

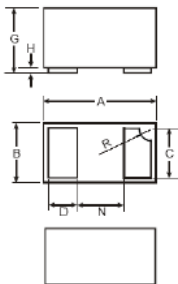
Features

- Uni-directional ESD Protection of Single Line
- Max. Peak Pulse Power is 150Watts @ 8/20us
- Capacitance is 45pF (Typical)
- Low Clamping Voltage
- IEC 61000-4-2, Level 4 (ESD), >±15KV by Air, >±8KV by Contact

Applications

- Computers and Peripherals
- Communication System
- Portable Electronics
- Audio & Video Equipment

Package & Dimension



SOD-882		
DIM.	MIN.	MAX.
A	0.95	1.07
B	0.55	0.68
C	0.45	0.55
D	0.20	0.30
G	0.47	0.53
H	0.00	0.05
N	0.40 (Typ.)	
R	0.05	0.15

All Dimensions in millimeter

PIN ASSIGNMENT	
1	Cathode
2	Cathode

Layout

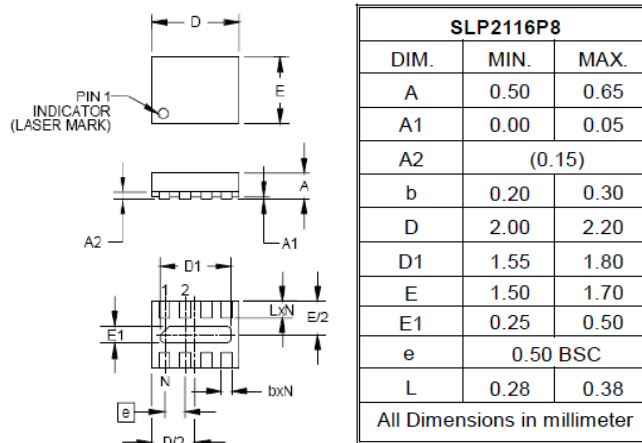


100ohms 10pF 4CH Filter in SLP2116

Features

- Bidirectional EMI/RFI Filter with Integrated TVS for ESD Protection
- Filter Performance is 30dB minimum attenuation 1.8GHz to 2.5GHz
- Eight Lines Protection and Filtering
- IEC 61000-4-2, Level 4 (ESD), >±15KV by Air, >±8KV by Contact

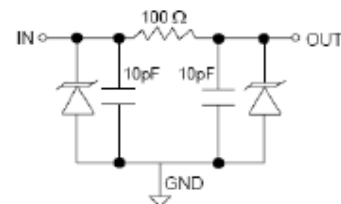
Package & Dimension



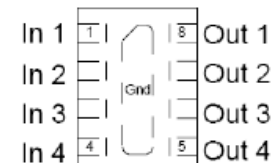
Applications

- Color LCD Protection
- Cell Phone CCD Camera Lines
- Clamshell /cell /phones
- Audio Filter

Layout



Device Schematic (4X)



Pin Assignment (Top Side View)

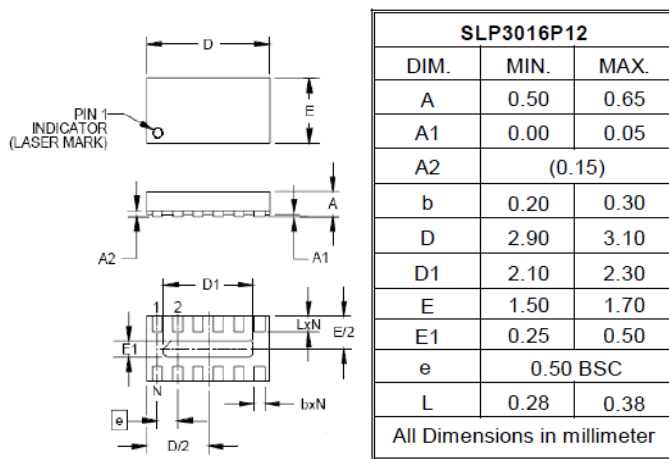
Features

- Bidirectional EMI/RFI Filter with Integrated TVS for ESD Protection
- Filter Performance is 30dB minimum attenuation 1.8GHz to 2.5GHz
- Eight Lines Protection and Filtering
- IEC 61000-4-2, Level 4 (ESD), >±15KV by Air, >±8KV by Contact

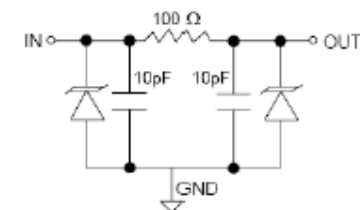
Applications

- Color LCD Protection
- Cell Phone CCD Camera Lines
- Clamshell /cell /phones
- Audio Filter

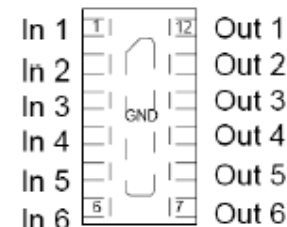
Package & Dimension



Layout



Device Schematic (6X)



Pin Assignment (Top Side View)

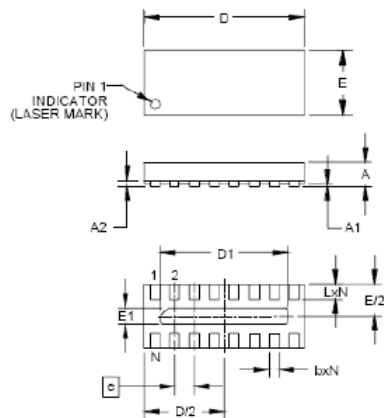
Features

- Bidirectional EMI/RFI Filter with Integrated TVS for ESD Protection
- Filter Performance is 30dB minimum attenuation 1.8GHz to 2.5GHz
- Eight Lines Protection and Filtering
- IEC 61000-4-2, Level 4 (ESD), >±15KV by Air, >±8KV by Contact

Applications

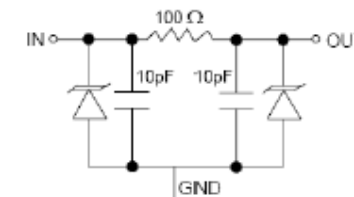
- Color LCD Protection
- Cell Phone CCD Camera Lines
- Clamshell /cell /phones
- Audio Filter

Package & Dimension

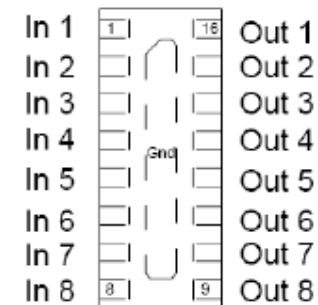


SLP4016P16		
DIM.	MIN.	MAX.
A	0.50	0.65
A1	0.00	0.05
A2	(0.13)	
b	0.20	0.30
D	3.90	4.10
D1	3.10	3.30
E	1.50	1.70
E1	0.25	0.50
e	0.50 BSC	
L	0.28	0.38
All Dimensions in millimeter		

Layout



Device Schematic (8X)



Pin Assignment (Top Side View)

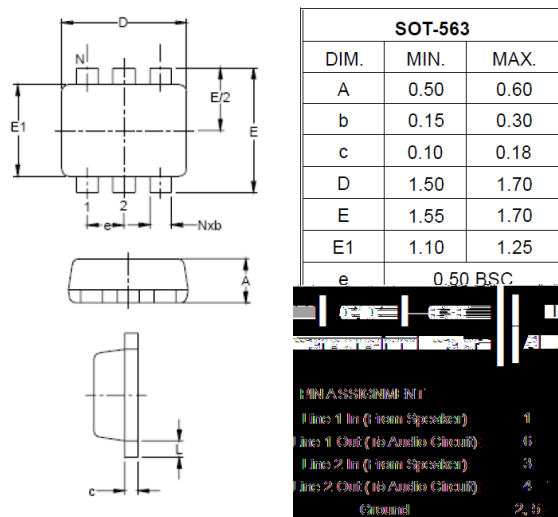
Features

- Bidirectional EMI/RFI Filter with Integrated ESD Protection
- Two Lines Protection and Filtering
- IEC 61000-4-2, Level 4 (ESD), >±15KV by Air, >±8KV by Contact

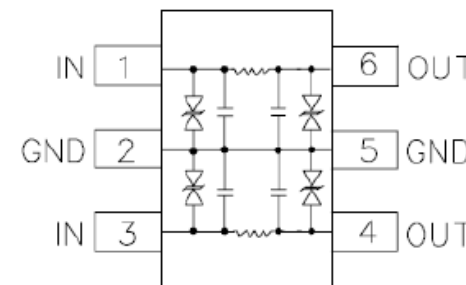
Applications

- Color LCD Protection
- Cell Phone CCD Camera Lines
- Clamshell /cell /phones
- Audio Filter
- Notebooks
- MP3 Players

Package & Dimension



Layout



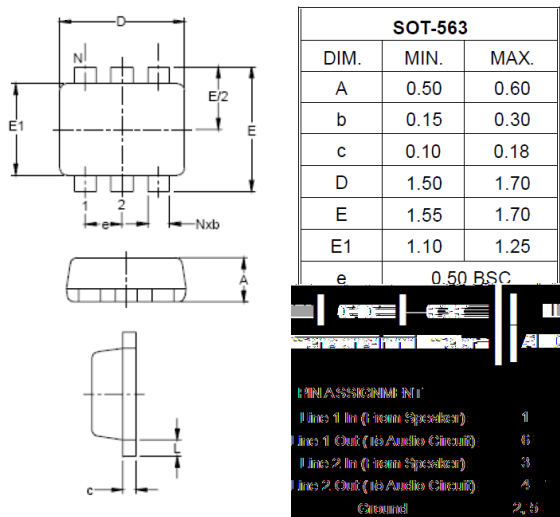
Features

- Bidirectional EMI/RFI Filter with Integrated ESD Protection
- Two Lines Protection and Filtering
- IEC 61000-4-2, Level 4 (ESD), >±15KV by Air, >±8KV by Contact

Applications

- Color LCD Protection
- Cell Phone CCD Camera Lines
- Clamshell /cell /phones
- Audio Filter
- Notebooks
- MP3 Players

Package & Dimension



Layout

