



Micro Commercial Components



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MLESD24B-0603

Multilayer Polymer ESD Suppressor

Features

- ESD protection for high speed data lines to IEC61000-4-2 ESD contact discharge 8KV, max 15KV
IEC61000-4-2 ESD air discharge 15KV, max 25KV
- Multilayer structure
- Surface mount
- Extremely low capacitance
- Very low leakage current
- Fast response time
- Bi-directional ESD protection
- Lead free solder termination
- The best ESD protection for high frequency, low voltage applications

Application

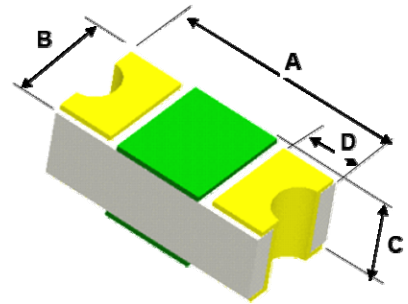
- High Definition Multi-Media Interface (HDMI)
- Digital Visual Interface (DVI)
- Display Port Interface
- Unified Display Interface (UDI)
- MDDI Ports
- Gigabit Ethernet
- USB2.0 and IEEE1394 interface

* Caution: This component is designed for signal line protection only, not intended to be used under bias, not for application with a power line.

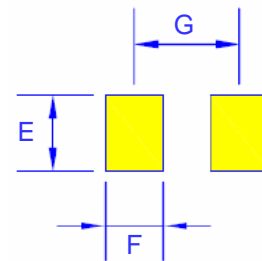
Environmental Specifications

- Operation temperature: -40~90°C
- Moisture Resistance, Steady state: MIL-STD-833,Method 1004.7, 85% RH,85°C,1000hrs
- Thermal Shock: MIL-STD-202,Method 107G,-55°C to150°C,30 min cycle,10 cycles.
- Vibration: MIL-STD-202F, Method 201A, (10 to 55 to 10HZ, 1 min. cycle, 2hrs each in X-Y-Z)
- Chemical Resistance: ASTM D-543, 4hrs @40°C, 3 solutions(H₂O, detergent solution, deluxer)
- Solder leach resistance and terminal adhesion: Per EIA-576 test

0603



Suggested Solder Pad Layout



DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	.057	.069	1.45	1.75	
B	.027	.038	0.70	0.95	
C	.011	.019	0.27	0.47	
D	.008	.020	0.20	0.50	
E	.035	.040	0.90	1.00	
F	.023	.028	0.60	0.70	
G	.051	.056	1.30	1.40	

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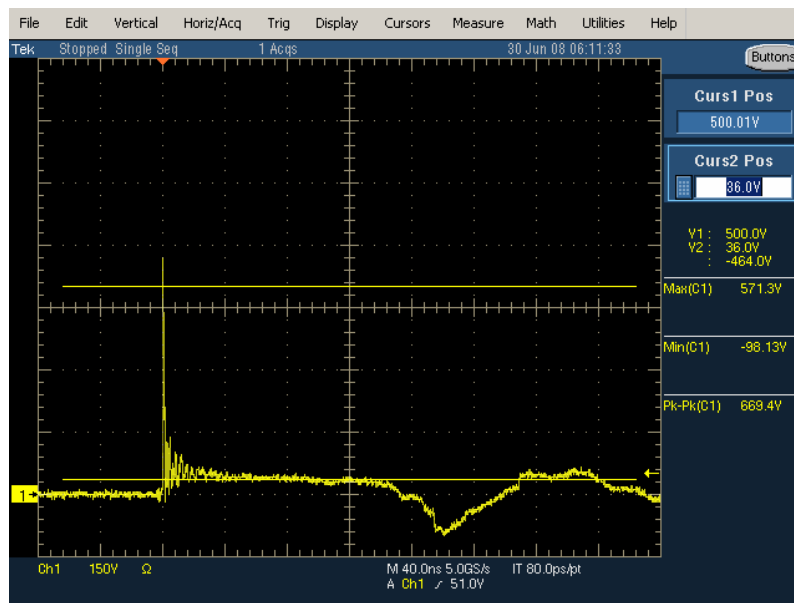
Electrical Characteristics

Electrical Characteristics						
Parameter	Symbol	Conditions	Min	Typ	Max	Units
Continuous operating voltage	V_{DC}	---	---	---	24	V
Trigger voltage	V_T	IEC61000-4-2 8KV contact discharge	---	500	---	V
Clamping voltage	V_C	EC61000-4-2 8KV contact discharge	---	36	---	V
Leakage current	I_L	24V V_{DC}	---	0.20	10	nA
Capacitance	C_P	VR = 0V, f = 1MHz	---	0.15	0.3	pF
Operating Temperature	---	---	-40	---	90	°C
Storage Temperature	---	---	-55	---	150	°C
ESD pulse withstand	Pulses	EC61000-4-2 8KV contact discharge	2000	---	---	---

Notes:

- 1, Trigger and clamping voltage measure per IEC 61000-4-2, 8KV direct discharge method

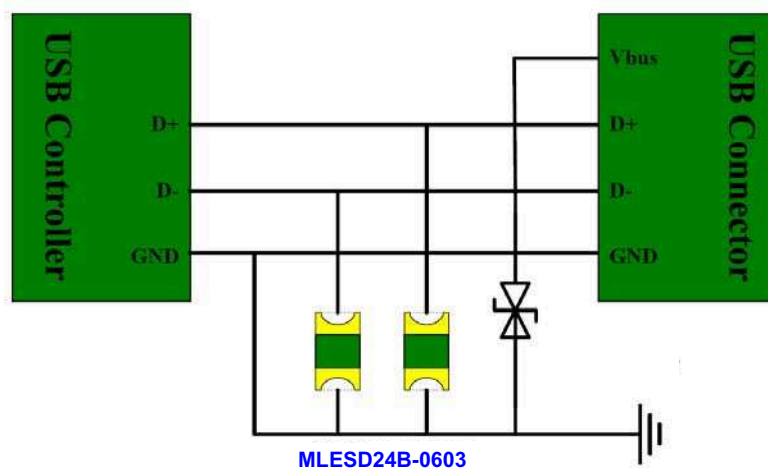
Typical MLESD clamping for +8KV pulse per IEC61000-4-2



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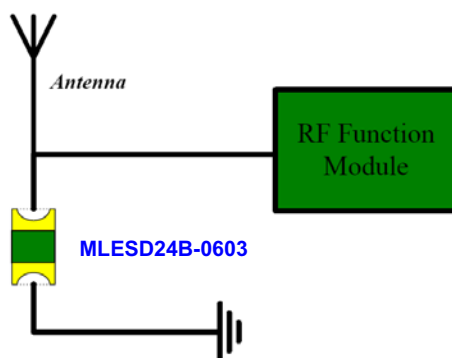
Design Recommendations for USB2.0

For USB2.0 port



Design Recommendations for Antenna

For antenna line





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Ordering Information

Device	Packing
(Part Number)-TP	Tape&Reel;5Kpcs/Reel

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Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

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- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



Как с нами связаться

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