

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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Micro Commercial Components

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MLESD24B-0603

Multilayer Polymer

ESD Suppressor

0603 Suggested Solder Pad Layout

DIMENSIONS								
	INCHES		ММ					
DIM	MIN	MAX	MIN	MAX	NOTE			
Α	.059	.067	1.50	1.70				
В	.027	.036	0.70	0.90				
C	.013	.017	0.33	0.43				
D	.015	.018	0.40	0.45				
ш	.035	.040	0.90	1.00				
F	.023	.028	0.60	0.70				
G	.051	.056	1.30	1.40				

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
- Multilaver 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℃ to150℃,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

MLESD24B-0603



Electrical Characteristics

Electrical Characteristics									
Parameter	Symbol	Conditions	Min	Тур	Max	Units			
Continuous operating voltage	V_{DC}				24	V			
Trigger voltage	V _T	IEC61000-4-2 8KV contact discharge		500		V			
Clamping voltage	Vc	EC61000-4-2 8KV contact discharge		36		V			
Leakage current	ΙL	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:

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



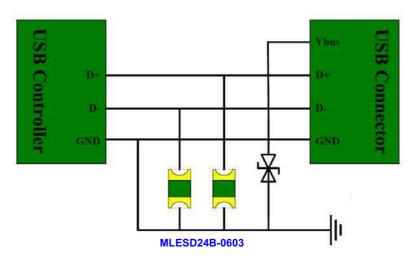
^{1,} Trigger and clamping voltage measure per IEC 61000-4-2, 8KV direct discharge method

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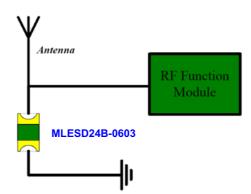
Design Recommendations for USB2.0

For USB2.0 port



Design Recommendations for Antenna

For antenna line





Ordering Information

Device	Packing
(Part Number)-TP	Tape&Reel5Kpcs/Reel

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