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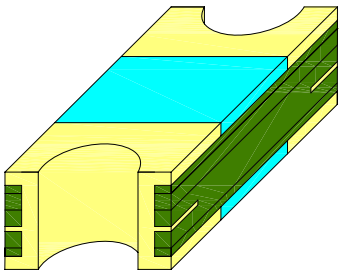
MLSEP* Series**

Multilayer Polymer ESD Suppressor MLSEP24A-0603 ROHS

Features



- Multilayer structure
- The ESD material hide in the middle of the component
- The planer surface easy to pick up
- Extremely low capacitance
- Very low leakage current
- Fast response time
- Bi-directional
- Surface mount
- Lead free solder termination
- Assistant equipment to pass IEC 61000-4-2
- The best ESD protection for high frequency, low voltage applications

Application

- Cellular phone
- Antennas (Cell phone, GPS…)
- High speed Ethernet
- USB2.0 and IEEE1394 interface
- DVI and HDMI interface

Electrical Characteristics

ESD Capability:

IEC 61000-4–2 direct discharge……8 KV

IEC 61000-4–2 air discharge……15 KV

Trigger voltage……300V

Clamping voltage……40V

Rated voltage……...24V typical

Capacitance……0.15pf

Leakage…….. < 5nA

Notes:

1. Trigger and clamping voltage measure per IEC 61000-4-2, 8KV direct discharge method
2. Capacitance measured at 1MHZ
3. Leakage current measured at 10VDC

Environmental Specifications

Operation temperature: -40~90℃

Moisture Resistance, Steady state: MIL-STD-833,Method 1004.7,85% RH,85℃,1000hrs

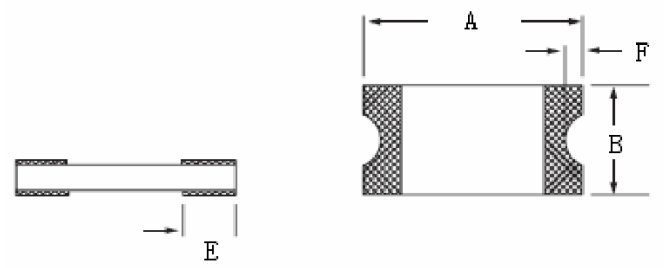
Thermal Shock: MIL-STD-202,Method 107G,-65℃to125℃,30 min cycle,10 cycles.

Vibration: MIL-STD-202F, Method 201A, (10 to 55 to 10HZ, 1 min. cycle, 2grs each in X-Y-Z)

Chemical Resistance: ASTM D-543, 4hrs @40℃, 3 solutions(H_2O,detergent solution, deluxer)

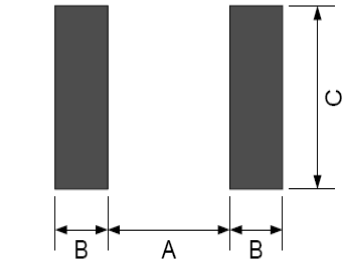
Solder leach resistance and terminal adhesion: Per EIA-576 test

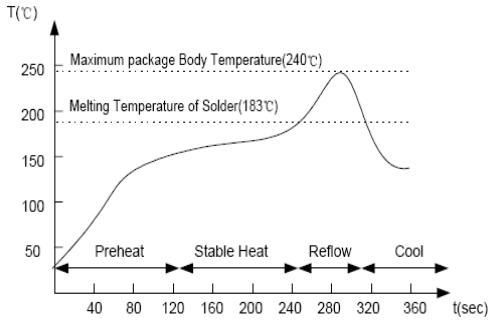
Product Dimensions (mm)



Part number	A	B	E	F
	Typ.	Typ.	Typ.	Typ.
MLSEP24A-0603	1.6	0.8	0.5	0.2

Solder Reflow Recommendation





Solder Pad Layouts

Part number	A (mm)	B (mm)	C (mm)
MLSEP24A-0603	0.5	1.0	0.9

* Recommended reflow methods: IR, Vapor phase oven, hot air oven, wave solder.
* Devices can be cleaned using standard industry methods and solvents.

Notes:

If reflow temperatures exceed the recommended profile, devices may not meet the performance requirements.

Effectivity: Reference documents shall be the issue in effect on the date of invitation for bid.

Caution: Operation beyond the rated voltage or current may result in rupture electrical arcing or flame.

Package Information

Tape & Reel: 4000pcs per reel.

Contact information

SEMITEL INTERNATIONAL LIMITED
14H , Universal Industrial Building , 19-25 Shan Mei Street , Fotan , Shatin , Hong Kong
Tel:00852-35273141 Fax:00852-35251735
EMAIL：info@semiteltech.com

Rev. letter		Date	
Design	Check	Audit	Approve

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Multilayer Polymer ESD Suppressor MLSEP24B-0603 ROHS

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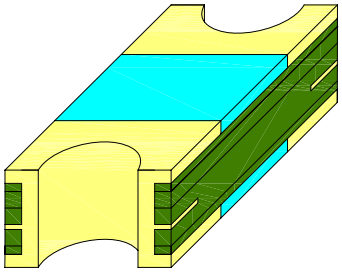

Application

- Cellular phone
- Antennas (Cell phone, GPS…)
- High speed Ethernet
- USB2.0 and IEEE1394 interface
- DVI and HDMI interface

Electrical Characteristics

ESD Capability:

IEC 61000-4–2 direct discharge……8 KV

IEC 61000-4–2 air discharge……15 KV

Trigger voltage……500V

Clamping voltage……150V

Rated voltage……...24V typical

Capacitance……0.15pf

Leakage…….. < 5nA

Notes:

1. Trigger and clamping voltage measure per IEC 61000-4-2, 8KV direct discharge method
2. Capacitance measured at 1MHZ
3. Leakage current measured at 10VDC

Environmental Specifications

Operation temperature: -40~90℃

Moisture Resistance, Steady state: MIL-STD-833,Method 1004.7,85% RH,85℃,1000hrs

Thermal Shock: MIL-STD-202,Method 107G,-65℃to125℃,30 min cycle,10 cycles.

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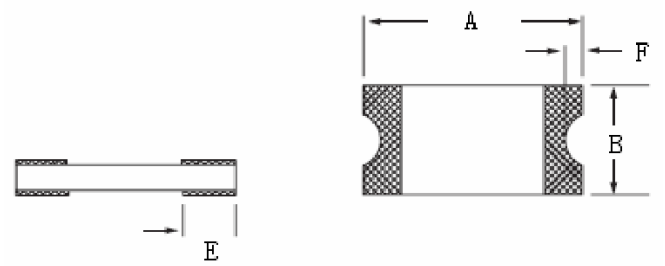
Chemical Resistance: ASTM D-543, 4hrs @40℃, 3 solutions(H_2O,detergent solution, deluxer)

Solder leach resistance and terminal adhesion: Per EIA-576 test

Product Dimensions (mm)



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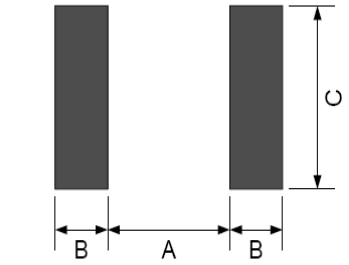

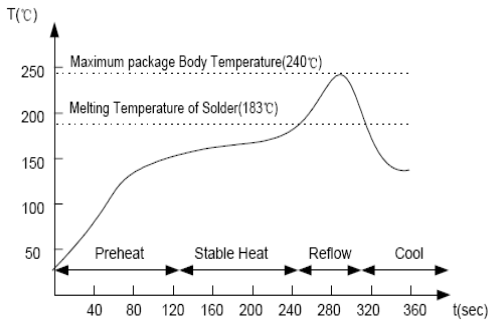

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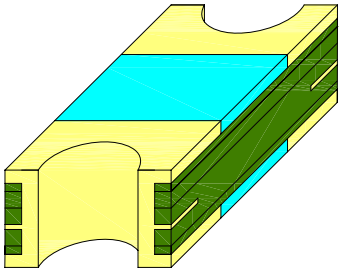

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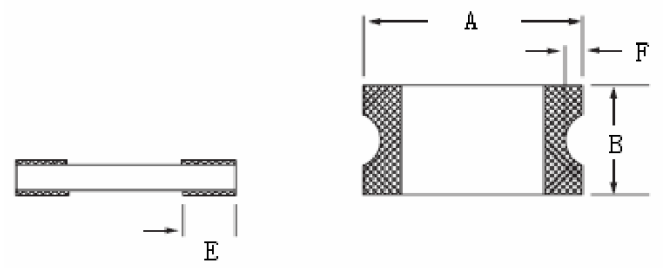

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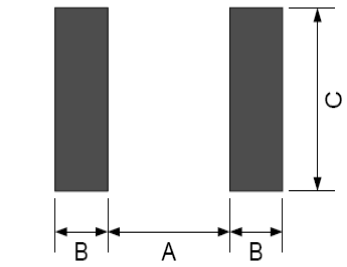

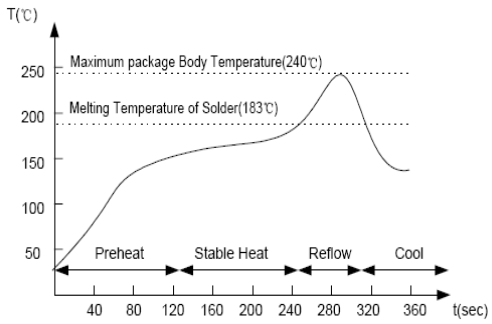

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