

**编带产品需使用有MSL3标识的铝箔袋包装**  
**All tape products need to be packaged in aluminum foil bags with MSL3 signs**

(2022-06-01 by CX)

# Change information – 变更信息

## ➤ Change Background （变更背景）：

考虑铝箔袋较防静电袋具有更好的防静电&防潮性，我们决定FMD所有编带产品切换成铝箔袋包装，并且在铝箔袋表面增加MSL3标识；

Consider that aluminum foil bags have better antistatic and moisture resistance than other packaging bags, we have decided to change the bags of all tape products to aluminum foil bags, and add the MSL3 signs on the surface of the aluminum foil bag.

## ➤ Influence product type （影响产品类型）；

FMD 所有编带产品 ；

All FMD Taping Products

## ➤ Proposed Implementation Date （计划实施日期）：

2022/08/01

# Change information – 变更信息

## ➤ Change Description （变更内容）：

1. 编带产品全部使用铝箔袋（抽真空）包装；

All tape products are vacuum packed in aluminum foil bags

2. 铝箔袋表面增加MSL3标识（原本只有防静电标识）；

Add MSL3 signs to aluminum foil bag.

3. 标签黏贴位置变化，将铝箔袋空白页作为正面，贴产品标签，有MSL3标识的一面作为背面；

The label sticking position is changed, the blank side of the aluminum foil bag is used as the front side, stick the product labels, and the side with the MSL3 signs is used as the back side.

# Results of the Assessment-评估结果

➤ Results of the Verification（验证结果）：

铝箔袋表面防静电标识&MSL3标识清楚，表面电阻测量合格；

The anti-static mark & MSL3 mark on the surface of the aluminum foil bag is clear, and the surface resistance measurement result is passed.

➤ Risk level（风险等级）；

☐ High ☐ Medium ☒ Low

此次变更只涉及包装材料，对产品质量&可靠性没有影响

This change only involves packaging materials and has no impact on product quality & reliability.

➤ Recommendations（建议）：

建议切换；

Agree to change aluminum foil bags as packaging bags for tape products.

# Appearance Compare – 外观对比



普通防静电袋  
Ordinary anti-static bag



铝箔袋（只有防静电标识）  
Aluminum foil bag  
(only anti-static signs)



铝箔袋（有防静电&MSL3标识）  
Aluminum foil bag  
(with anti-static signs & MSL3 signs)

# Signs information – 标识信息



|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                        |              |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------|--------------|
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | <b>Caution</b>                                         | <b>LEVEL</b> |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | This bag contains<br><b>MOISTURE-SENSITIVE DEVICES</b> | <b>3</b>     |
| <small>If blank, see adjacent bar code label</small>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                        |              |
| 1. Calculated shelf life in sealed bag: 12 months at $< 40^{\circ}\text{C}$ and $< 90\%$ relative humidity (RH)<br>2. Peak package body temperature: <u>260</u> $^{\circ}\text{C}$<br><small>If blank, see adjacent bar code label</small><br>3. After bag is opened, devices that will be subjected to reflow solder or other high temperature process must<br>a) Mounted within: <u>168</u> hours of factory conditions<br><small>If blank, see adjacent bar code label</small><br>$< 30^{\circ}\text{C} / 60\% \text{ RH}$ , OR<br>b) Stored at $< 10\% \text{ RH}$<br>4. Devices require bake, before mounting, if:<br>a) Humidity Indicator Card is $> 10\%$ when read at $23 \pm 5^{\circ}\text{C}$<br>b) 3a or 3b not met<br>5. If baking is required, devices may be baked for 48 hours at $125 \pm 5^{\circ}\text{C}$<br>Note: If device containers cannot be subjected to high temperature or shorter bake times are desired, reference IPC/JEDEC J-STD-033 for bake procedure<br>Bag Seal Date: _____<br><small>If blank, see adjacent bar code label</small><br>Note: Level and body temperature defined by IPC/JEDEC J-STD-020 |                                                        |              |

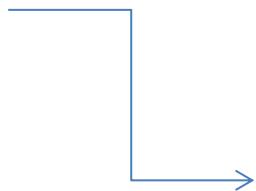
铝箔袋上的防静电&MSL3标识

Anti-static & MSL3 signs on foil bags

# label position – 标签位置



变更前，标签位置贴在防静电袋的正上方  
Anti-static & MSL3 signs on foil bags



正面，在标记位置处贴产品标签  
Front, apply product labels at marked locations



背面，有防静电标识&MSL3标识  
Back (with anti-static signs & MSL3 signs)

| 检测项目<br>Test items                     | 铝箔袋<br>foil bags                                                                                                                                                                                                                                                                                                                                                                                                                       |
|----------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| MSDS                                   | <br>MSDS                                                                                                                                                                                                                                                                                                                                            |
| SGS                                    | <br>SGS                                                                                                                                                                                                                                                                                                                                             |
| 表面电阻检测<br>Surface Resistance Detection | <p>Range values are <math>10^6 - 10^{11}\Omega</math>,<br/>the actual detection value is <math>10^9\Omega</math>.</p> <div>    </div> <div> <p>1</p> <p>2</p> <p>3</p> </div> |

# Key Indicator Summary-关键指标摘要

| INDICATOR<br>指标                   | PREDICTED IMPACT<br>预测影响 |
|-----------------------------------|--------------------------|
| Product/Process Capability (制程能力) | None(不影响)                |
| Yield (良率)                        | None(不影响)                |
| Output Quality (质量)               | <b>Improve(提升)</b>       |
| Reliability (可靠性)                 | None(不影响)                |
| Productivity (生产率)                | None(不影响)                |
| Capacity (产出能力)                   | None(不影响)                |
| Cost (成本)                         | <b>Increased(增加)</b>     |
| Others(其它)                        | None(不影响)                |

# Conclusion – 结论

## ➤ Conclusion（结论）：

确认铝箔袋外观&防静电效果均合格，建议变更；

Confirm that the appearance and anti-static effect of the aluminum foil bag are qualified, it is recommended to change.

## ➤ Influence product type（影响产品类型）；

FMD 所有编带产品；

All FMD Taping Products.

## ➤ 请关注：后续12个月内，出货时新旧包装将会交替出货，直至旧包装出货完成为止。

Noted : In the following 12 months, the new and old packaging will be alternately shipped when shipping, until the old packaging is shipped.

# THANK YOU