1 回路欠陥

线路缺陷/Conductor defects

1-1 断線/开路/Electrical open

1 – 1 – 1 異物起因(断線)/杂物起因(开路)/ Caused by foreign object(electrical open)

1-1-1-1 **単独異形断線**/单独的异型开路 / Single open by a foreign object

【特徴】回路線一本の断線で断線部の形状がシャープで異物の形状に似ていることが特徴。

【特征】在线路中有一处开路,开路的形状清晰,好像杂物的样子。

[Characteristics] An open of one conductor. The shape of the broken line is clear cut and looks like the shape of a foreign object.

【原因・判断ポイント・発生工程】回路線幅以上で 導体幅+導体間隔より小さい不透明で薄い片状異物 が、回路露光時にDFRより上に介在し、露光が遮 ぎられて出来たもの。ET液の流れやワークの進行 方向によって、エッジ部が丸みを帯びる(露光焼付 ~ET工程)

【原因、判断要点、发生工序】在 DFR 上夹杂大于线宽, 但小于线宽+线距的不透明薄片杂物, 妨碍曝光而引起的。由于 ET 液的流动和板件的进行方向的作用, 边缘呈圆状(曝光~ET工序)。

[Causes/processes involved/keys to judgment]

Exposure light is blocked by an opaque and thin foreign object on dry film resist. The object is larger than the conductor width and smaller than the sum of conductor width and conductor spacing to cause this defect. The edge becomes rounded by the flow of the etchant or in the moving direction of the panel. (Exposure and etching process)



顕微鏡倍率× 50 [注释] 显微镜倍率× 50

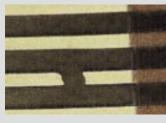
[Coments] Magnification: ×50



[コメント] 顕微鏡倍率× 60

显微镜倍率 × 60

[Coments]
Magnification: ×60



【コメント】 FPC 端子部 【注释】

FPC 插脚

[Coments] FPC edge contact



【コメント】 FPC 【注释】

FPC [Coments]

[Coment FPC