Product /Process Change Notification

PCN Originator:

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Change Type:

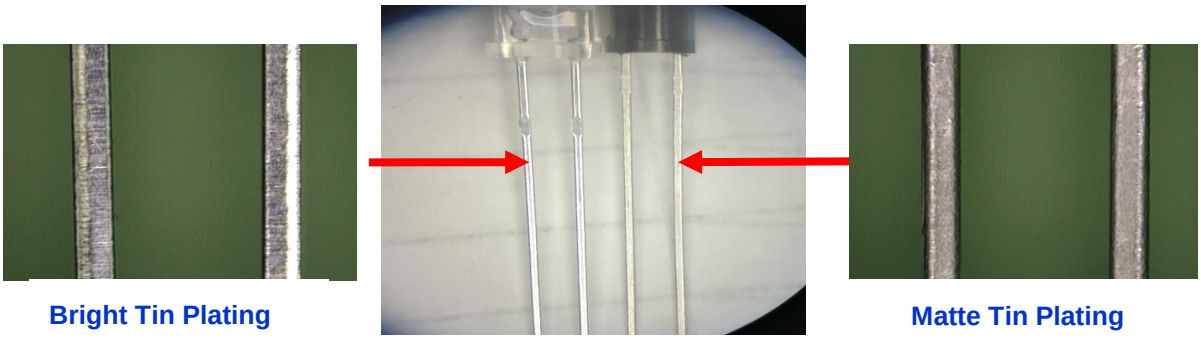
CZ factory would like to change lead frame from Bright tin plating to Matte tin plating(non-function area).

Part Affected or Product Description:

All of SSD through hole products LTE-XXX & LTR-XXX in CZ factory.

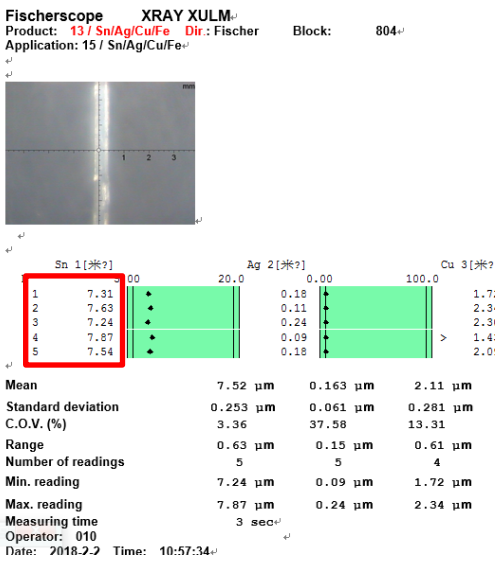
Description and Extent of Change:

1. Appearance

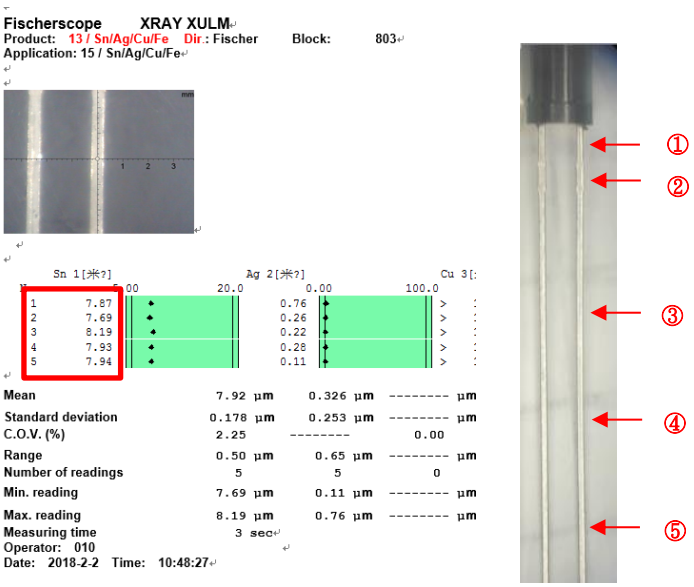


Bright Tin Plating　　Matte Tin Plating

2. Tin plating thickness measurement



Bright Tin Plating



Matte Tin Plating

Result: The uniformity of tin film is no difference.

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3. Tin whisker test

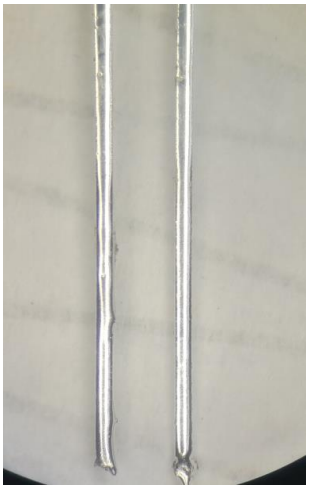
Test Title	Test condition	Test Period	S/S	In spec result (found/total)	Whisker size (max)
Room Temp Storage	25℃	1000h	10	0/10	no whisker
		3000h			no whisker
		5000h			no whisker
TC Temp cycling	-40℃~85℃	500cy	10	0/10	no whisker
		1000cy			no whisker
		1500cy			no whisker
THS Temp and Humidity Storage	60℃/90%	500h	10	0/10	no whisker
		1000h			no whisker
		1500h			no whisker

4. Solder ability

Do solder dip for both bright tin plating and matte tin plating product



Bright Tin Plating



Matte Tin Plating

Result: >95% area covered by Sn, solder ability result is no difference.

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Reason of Change:

To optimize IR products, CZ factory would like to implement lead frame in Matte tin plating with the same performance as Bright tin plating.

Effective Date of Change:

May 1, 2018, Running change

Availability of Sample and Datasheet:

1. No impact to product outline dimension and electrical/optical function.
2. Reliability test verification, both the experimental group and the control group had no problems.

Response Date: This PCN is considered approved, without further notification, unless we receive specific customer concerns within 1 months after the PCN issuance date.

These changes have been reviewed and approved by Lite-On Technology engineers and managers per Lite-On Technology procedure: Change Control and Customer Notification, PCN-20180019
Please contact your Lite-On Technology Sales/Customer Service/Filed sales engineer or Contact Center (http://optoelectronics.liteon.com/en-us/about/contact-us.aspx) for any questions or support requirements. Please return any response as soon as possible, but not to exceed 30 days.