

Light is OSRAM

08/03/2015

Dear Customer,

please find attached our OSRAM OS PCN:

OS-PCN-2015-001-A

Introduction of new leadframe supplier for pulse laser products

Important information for your attention:

Please respond to this PCN by indicating your decision on the approval form, sign it and return to your sales partner before **09/10/2015**.

OSRAM OS aligns with the widely-recognized JEDEC STANDARD "JESD46-B", which stipulates: "Lack of acknowledgement of the PCN within 30 days constitutes acceptance of the change".

Your prompt reply will help OSRAM OS to assure a smooth and well executed transition. If OSRAM OS does not hear from your side by the due date, we will assume your full acceptance to this proposed change and its implementation.

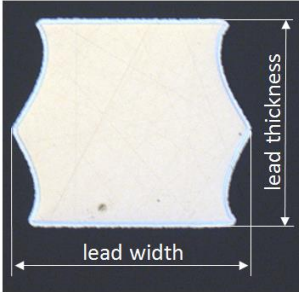
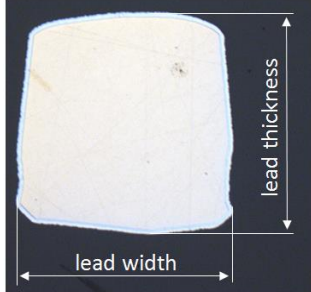
Your prompt reply will help OSRAM OS to assure a smooth and well executed transition. If OSRAM OS does not hear from your side by the due date, we will assume your (if you are a Distributor: and your customer's) full acceptance to this proposed change and its implementation.

Your attention and response to this matter is highly appreciated.

Please direct your inquiry to your local Sales office.

OS-PCN-2015-001-A

Introduction of new leadframe supplier for pulse laser products

Subject of change:	Introduction of new leadframe supplier for pulse laser products	
Products affected:	SPL PL90 SPL PL90_3 SPL PL90_3E	
Reason of change:	Harmonization of Radial leadframe suppliers and production process.	
Description of change:	<p><u>Current status</u> Leadframe manufacturing by etching process</p>	<p><u>New status</u> Leadframe manufacturing by stamping process (standard process for radial devices)</p>
Cross section lead (typical photo):		
Product identification:	Date code	
Time schedule:	Final qualification report	available
	Samples available	available
	Production release (earliest)	12/01/2015
	Start of delivery (earliest)	01/01/2016
Assessment:	No change in dimensions as defined in product data sheet. No change in leadframe base material and galvanic layer material and thickness specification	
Documentation:	2_cip_OS-PCN-2015-005-A_Rel_Data	

Customer approval form

OS-PCN-2015-001-A

Introduction of new leadframe supplier for pulse laser products

Please list product(s) affected in your application(s):

Please check the appropriate box below:

Agreement: We agree with the proposed change and accept start of the shipment upon availability of the new version.

Objections: We have objections:

Information requested: We need the following information:

Samples requested: We need the following samples:

Sender

Company:

Address / Location:

Signature:

Date:

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Qualification Report

150282C1

Subject	Qualification report for pulslaser package family SPL PL90_3 acc. OS-PCN-2015-001-A
Date	09.07.15
Tested device	SPL PL90_3
Brand (including sub brands)	Pulsed Laser
Applies to	SPL PL90_3

Test Performed	Condition	Duration	Sample Size	Failures		
				El.	Opt.	Vis
Resistance to soldering heat (RTSH) <i>JESD22-B106</i>	TTW soldering 260°C	3x	3x26	0	0	0
Temperature cycle (TC) <i>JESD22-A104</i>	-40°C/+100°C 15min each extreme	500c	3x26	0	0	-

Failure criteria:**Optical failures:**

Popt > ± 50% from initial value
λ_{peak} < 895nm, > 915nm

Visible failures: broken or damaged package or lead

Conclusion: The tested devices fulfill the reliability requirements.

Disclaimer

PLEASE CAREFULLY READ THE BELOW TERMS AND CONDITIONS BEFORE USING THE INFORMATION.
IF YOU DO NOT AGREE WITH ANY OF THESE TERMS AND CONDITIONS, DO NOT USE THE INFORMATION.

The Information contained in this Document does not constitute an independent warranty. The committed behavior is described in the Product data sheet and/or further, mutually agreed specifications.

Distribution of part or all of the contents of this Document to any 3rd party in any form without the prior permission of OSRAM Opto Semiconductors GmbH is prohibited except in accordance with applicable mandatory law.

Further explanations:

Data: The Data used in this Document consider the reliability test results under the mentioned driving conditions only.

For Product information on the maximum operating conditions and the OSRAM OS standard qualification profile please refer to the Product data sheet or contact your local sales partner.

Conditions: The conditions for the generation of the Data are as follows:

1. The Data and curves shown in this Document are based on experiments carried out under laboratory conditions on a random sample size of LED/IRED/Laser/Detector with readouts at discrete readout times (where applicable). Thus, the Data above represent a limited number of production lots only and may differ between different assembly lots over time (including chip or package changes). Thus, the behavior of the LED/IRED/Laser/Detector in the final application may differ from the Data. The behavior of the LED/IRED/Laser/Detector at conditions or readout times deviating from those stated above may not be deduced from the Data.

2. If applicable:

a) Extended driving conditions:

The tested driving conditions exceed the maximum limits stated in the Product data sheet. Therefore a reduced lifetime or an accelerated degradation is expected. Failure limits noted in the Document refer to the testing condition according to the OSRAM OS standard Product qualification profile and not to the actual testing condition.

b) Extended testing duration:

The testing duration exceed the OSRAM OS standard qualification profile of the mentioned Product. Failure limits noted in the Document refer to the testing duration according to the OSRAM OS standard Product qualification profile and not to the actual testing duration.

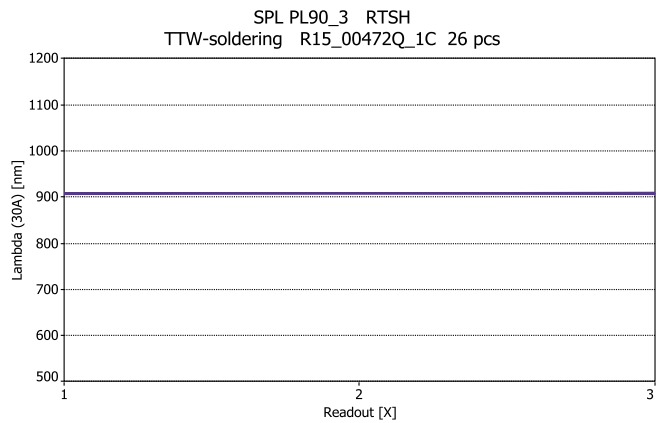
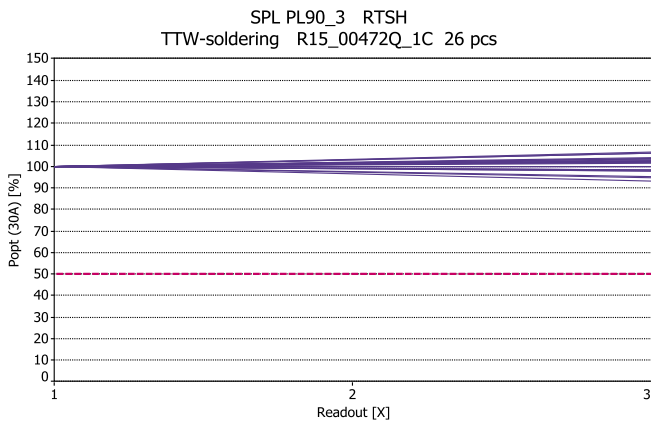
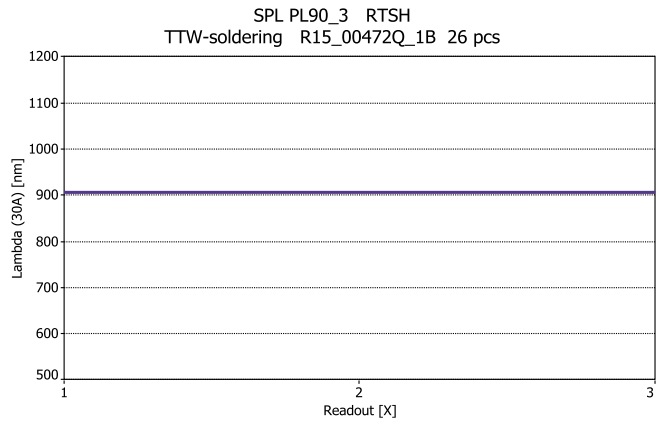
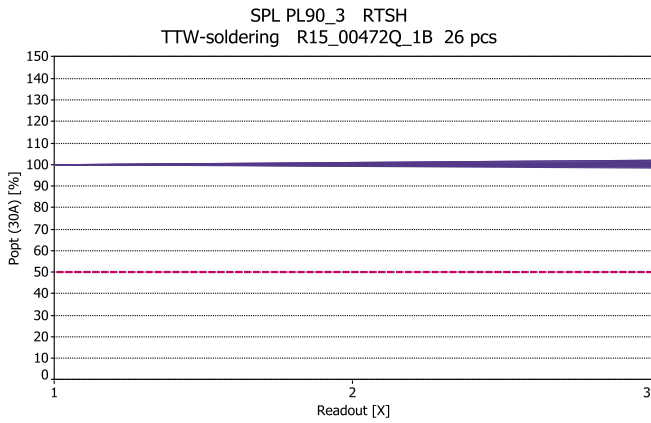
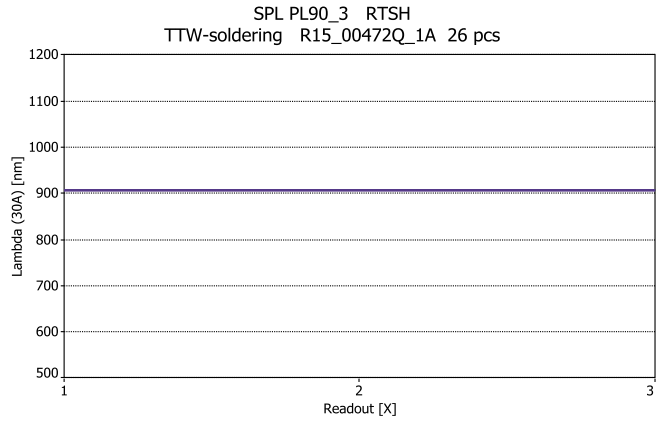
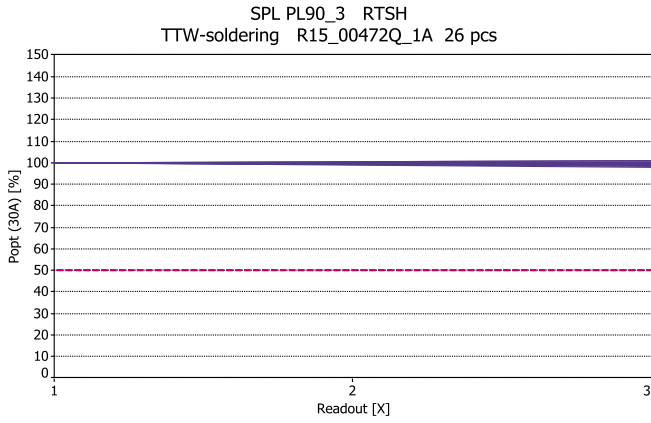
c) Exceeding standard qualification conditions – (Product data sheet limits not affected):

The tested driving conditions exceed the OSRAM OS standard qualification profile of the mentioned Product. Therefore a reduced lifetime or an accelerated degradation is expected. Failure limits noted in the Document refer to the testing condition according to the OSRAM OS standard Product qualification profile and not to the actual testing condition.

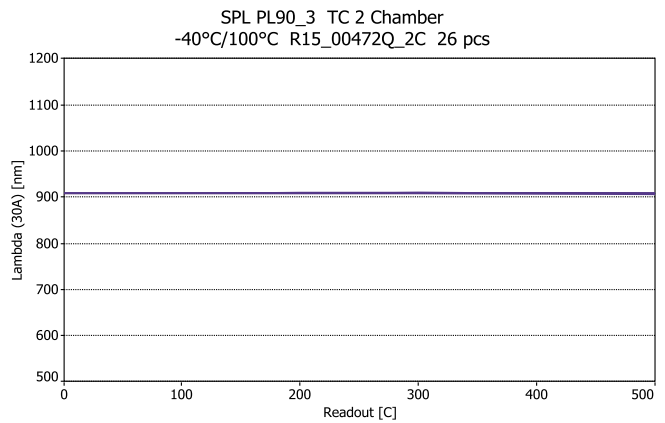
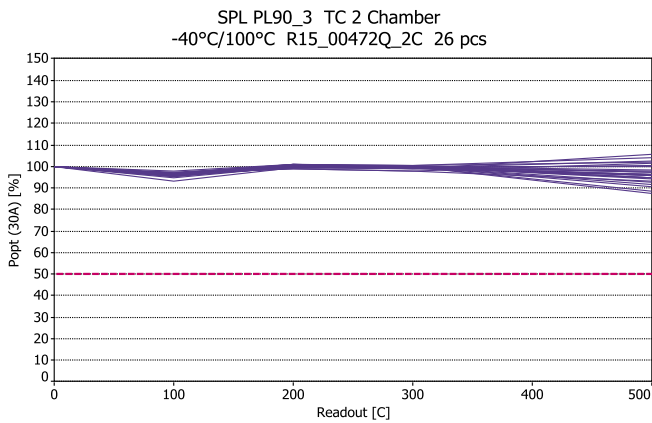
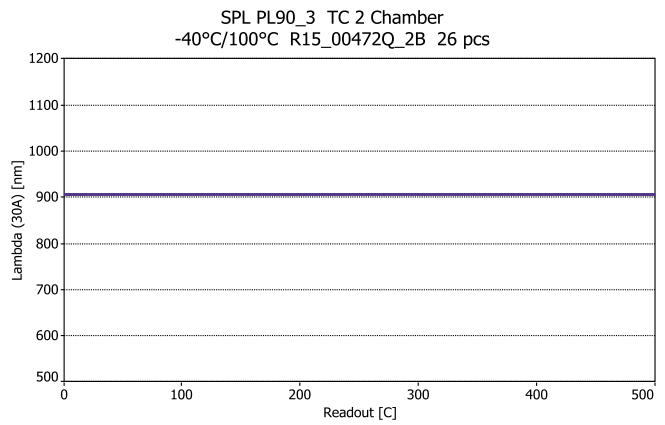
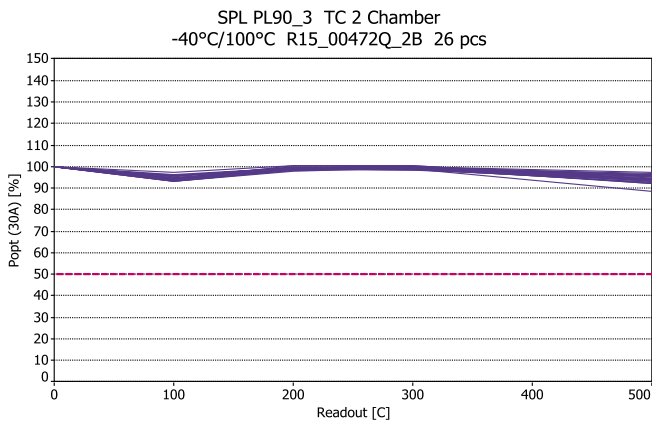
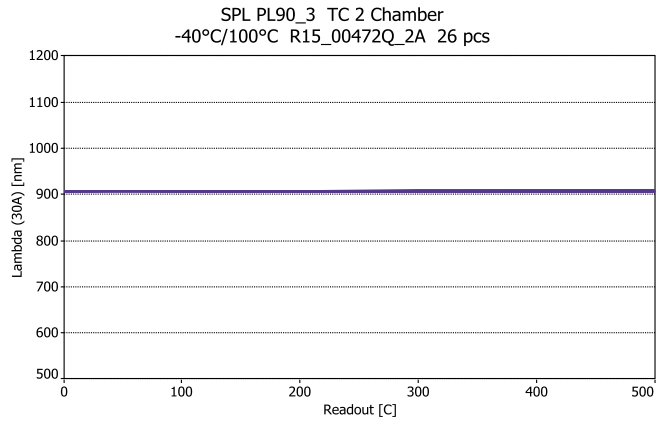
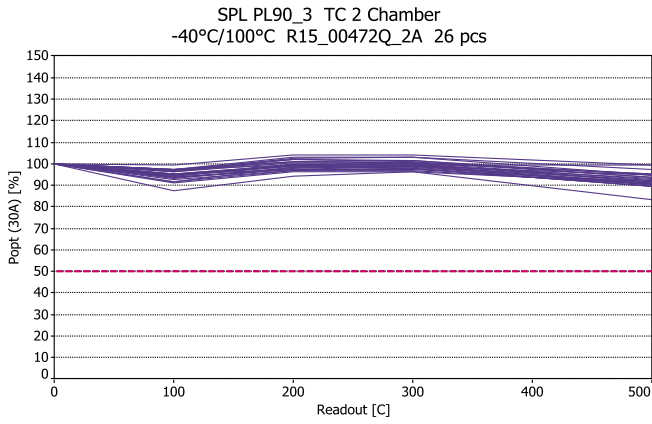
3. For long term operation additional failure modes of the chip or package can occur which are not shown in this Document.

4. Possible differences in the thermal management of OSRAM OS and customer's setup may lead to a different aging behavior.

RTSH TTW-soldering



TC 2 Chamber -40/+100°C



END OF DOCUMENT

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