

PCN: V09-094-00475504-OA

Product Change Notice

Issue Date: 06 Feb 2009

Change Type:

Major change

Parts Affected:

APDS-9700-020, QPDS-M901, QPDS-M906, QPDS-M910

Description and Extent of Change

Change of assembly site.

Change of lead frame design for identification purpose.

Reasons for Change:

To increase the production capacity in order to support customer demand.

Effect of Change on Fit, Form, Function, Quality, or Reliability:

The device specification will remain the same, which will ensure product electrical performance remains the same. Pls see Fig.1 for the some subtle package outline difference between the 2 sources. Appropriate electrical characterization and reliability qualification will be performed on representative products to insure normal parametric distribution, consistent electrical performance, and reliability.

Comparison of the package outline between the current source (LHS of Fig.1) and new source (RHS of Fig.1).

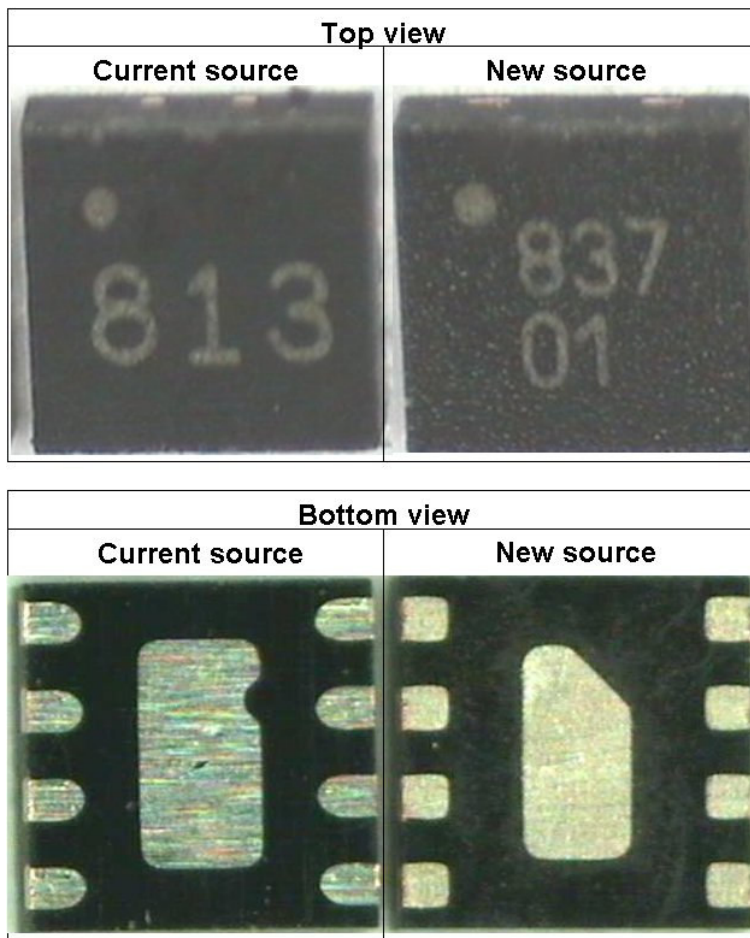
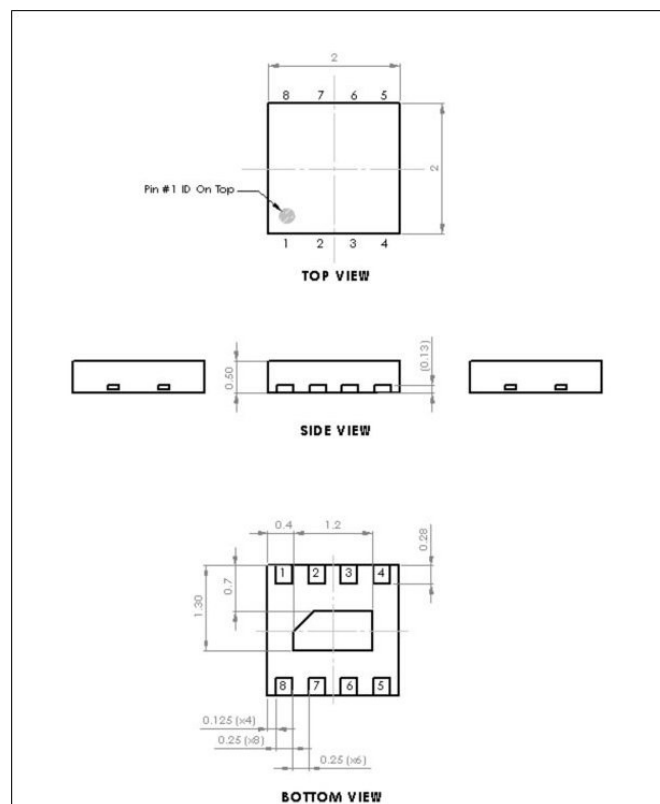
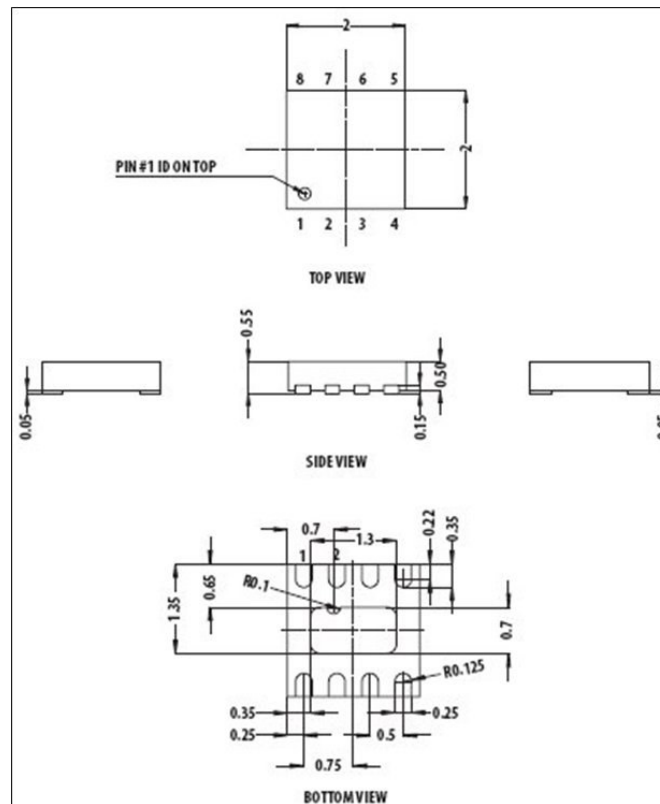


Figure 1: Physical inspection of the APDS-9700 between the 2 sources.

Summary

- 1) Laser mark is extended to 5 characters to denote YWWLL, where Y-year, WW – workweek, and LL –lot number.
- 2) Pad size is slightly different. However, the exiting solder land pattern can be used for both packages.



Effective Date of Change:

The change will be starting from production datecode 0919. Timing of shipment of the changed part will vary by part number depending on customer demand, and inventory levels.

Qualification Data:

Qualification data is attached below.

QUALIFICATION RESULTS SUMMARY

Test Name	Test Conditions	Duration	Units Tested	Results
Pre-condition	<ul style="list-style-type: none">• Soak samples for 168 hours at 85°C/85%RH.• 3 times reflow at 260°C peak.• 5 cycle T/C at -40°C to 125°C.	168 hrs	All units which are sent for stress test	0 failure
T/C	-40 / 125°C: 15 min dwell, 5 min transfer	500 cyc	231	0 failure
PCT	121 °C , 100% RH , 2 atm	96 hrs	231	0 failure
HTOL	Ta=125°C, Vcc = 3.6 V	500 hrs	168	0 failure
WHTOL	85°C/ 85% RH, Vcc = 3.6V	500 hrs	231	0 failure
HTSL	150°C	500 hrs	231	0 failure
LTOL	Ta= -40°C, Vcc= 3.6V	500 hrs	56	0 failure

These changes have been reviewed and approved by Avago Technologies engineers and managers per Avago Technologies procedure: Change Control and Customer Notification, A-5962-6052-80.

Please contact your Avago Technologies field sales engineer or Contact Center (<http://www.avagotech.com/contact/>) for any questions or support requirements. Please return any response as soon as possible, but not to exceed 30 days.