



PCN Number: 1604-1
Chgnot.doc rev. __ 8/16

Product/Process Change Notification (PCN)

Customer: SOLID STATE SUPPLIES LTD

Date: 24 August 2016

Customer Part # affected:

A1225LUA-T	A1227LUA-T	A1229LUA-T	A3213EUA-T	A3214EUA-T
A1225LUA-I-T	A1227LUA-I-T	A1229LUA-I-T	A3213LUA-T	A3214LUA-T
<i>Including all finishing suffix variations of the sales root listed</i>				

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Duration of Change:

Permanent



Temporary (explain)



Summary description of change: Part Change:



Process Change:



Other:



Allegro is discontinuing its legacy UA 3-pin single inline package (SIP) as we invest in our next generation UA SIP featuring advancements in assembly technology, a matrix high density (HD) leadframe, and state of the art mold compound. Please take note of the minor dimensional and material changes.

What is the part or process changing from?

1. Package:

Allegro's legacy UA package. Please reference DWG-0949.

Mold Compound: MG35F

Package lead length: 15.75 +/- 0.51 mm

Lead Finish: Trim after tin plate

Dam bar from package: 2.16 mm

Mold gate top of the package: None

No Draft Angle from Top Mold to back of package

2. Top Branding:

See attached picture for existing Allegro UA package branding.



What is the part or process changing to?

1. Package:

Allegro’s Matrix HD UA package. Please reference DWG-9067.

Mold Compound: G700-LS, Rohs compliant low stress, green mold compound

Package lead length: 14.99 +/- 0.25 mm

Lead Finish: Trim before Tin plate resulting in plating of the dambar with no exposed Cu

Dam bar from package: 1.02 mm

Mold gate top of the package: The redesigned with mold “pull-backs” in the gate and tie bar areas prevent mold flashing and burrs from protruding beyond the gate and tie bars.

The 10° Draft Angle from Top Mold to back of package improves ejection from the mold.

2. Top Branding:

Please see attached picture of top brand of Matrix HD UA package.

Other minor changes in the flow and BOM internal to the package will be provided in the PPAP.

There is no impact to function.

Note: Validation of equivalence within a specific application is at the discretion of the Customer.

Is a PPAP update required?

Yes

No

Reliability testing required?

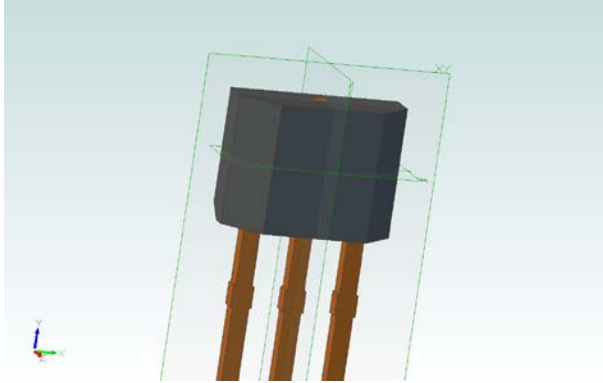
(See attached qual results)

Yes

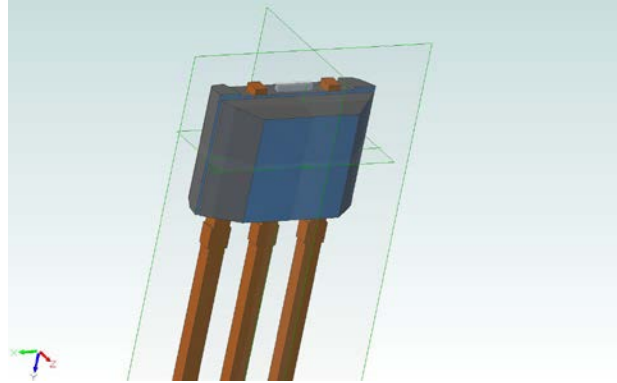
No (explain)



Legacy UA vs Matrix HD UA - Visual Differences



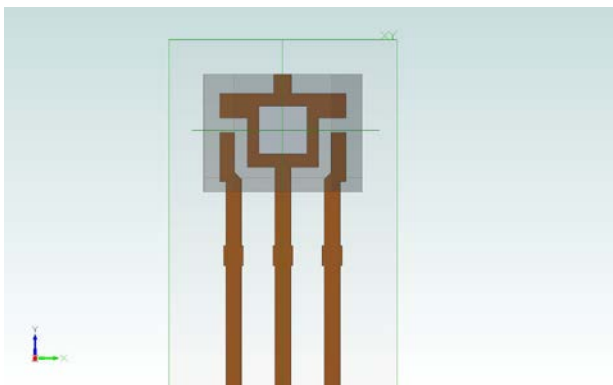
Legacy UA



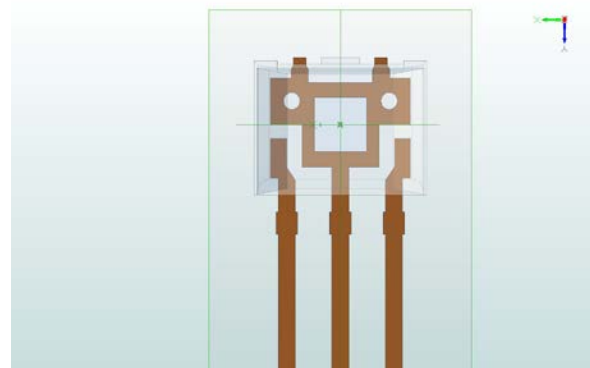
Matrix HD UA

- Top of package on the Matrix HD UA has tie and dam bar protrusions

Legacy UA vs Matrix HD UA – Leadframe Differences



Legacy UA leadframe

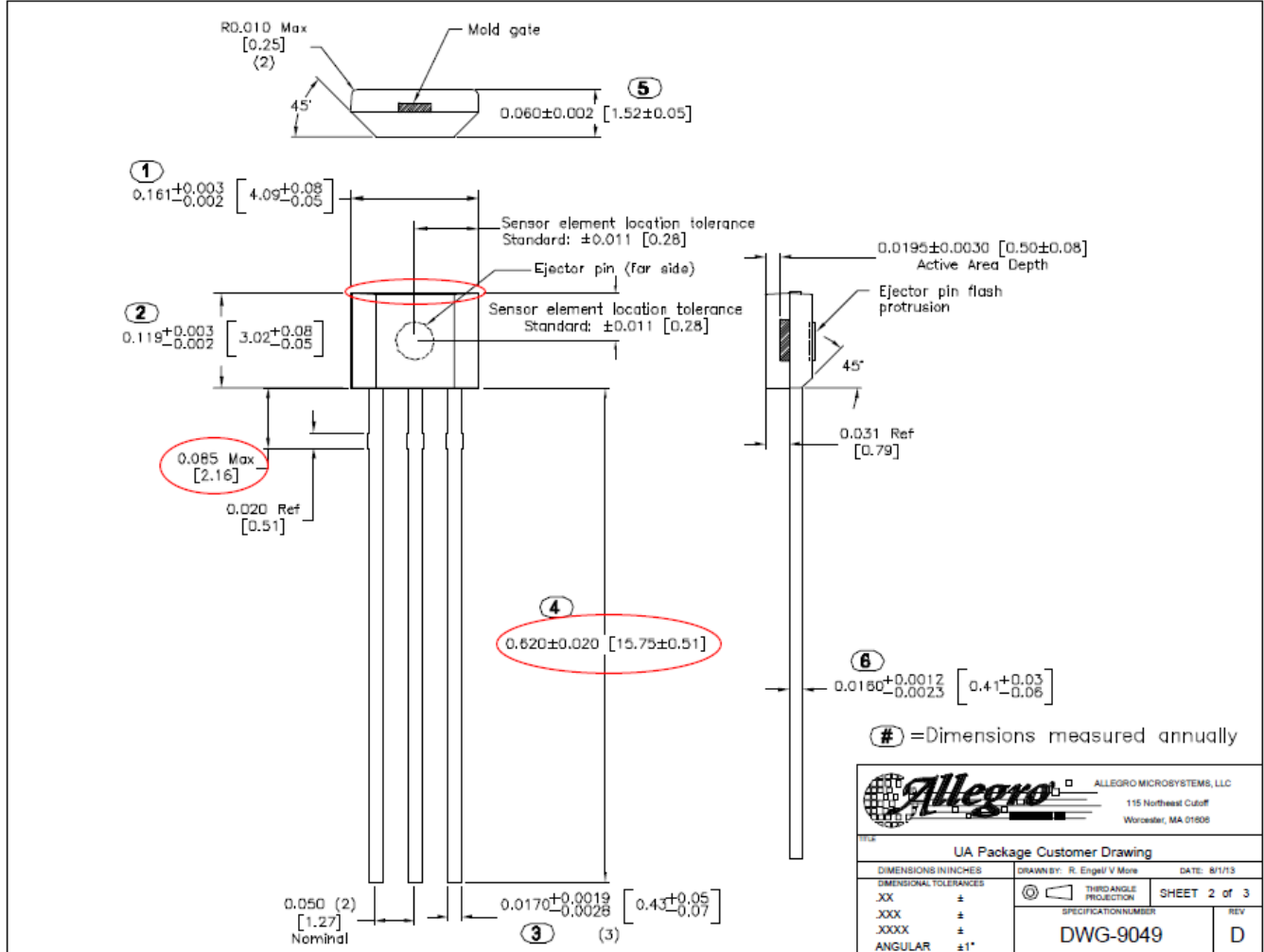


Matrix HD UA leadframe



Legacy UA vs Matrix HD UA – Dimensional Comparison

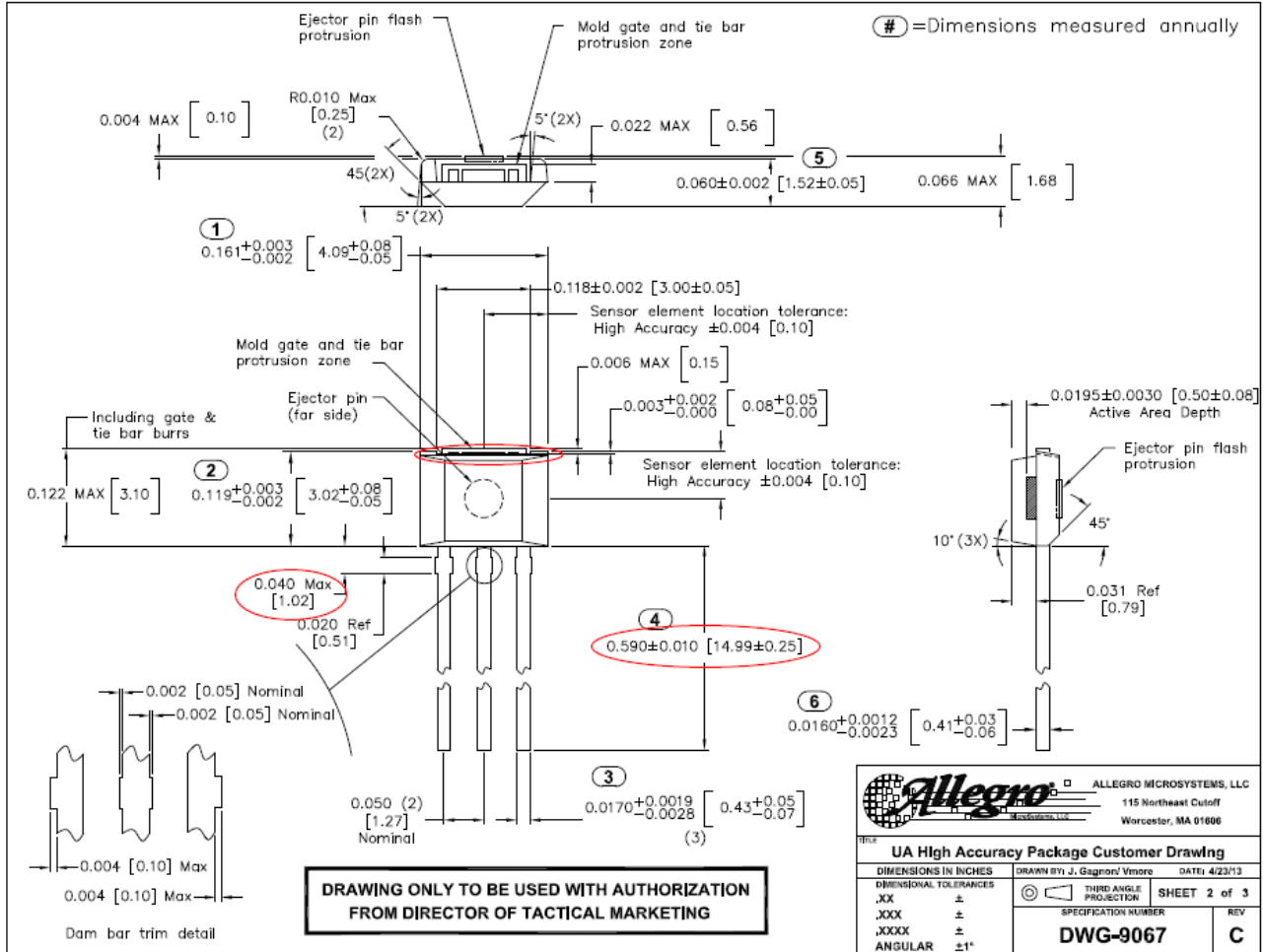
Legacy UA





Legacy UA vs Matrix HD UA – Dimensional Comparison Continued

Matrix HD UA



Package	Width (mm)	Height (including tie & gate bar protrusions) (mm)	Lead Length (mm)	Leadframe Mold Offset (mm)
Legacy UA	4.09 (+0.08, -0.05)	3.02 (+0.08, -0.05)	15.75 +/-0.51	+/-0.101
Matrix HD UA	4.09 (+0.08, -0.05)	3.02 (+0.08, -0.05)	14.99 +/-0.25	+/-0.051



Top Branding Comparison

Legacy UA	Matrix HD UA
01E	101

- **Legacy UA Top Branding:**
Last two digits of part number + Temperature range designator
- **Matrix HD UA Top Branding:**
Last three digits of the part number

