
 SiMPore Precision Membrane Technologies	Record Number: Hexagon Apertures	Record Version: 1	Record Rev. Date: 8/11/2025
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1. OVERVIEW

Original Issue Date	TBD	ECN #	N/A
Sample Available Date	August 2025	Product #(s)	See Section 5
Effective Date	Various	Product Ver.	N/A
Production Date	All after July 2025	Lot # (s)	Multiple
PO Number (s)	N/A	Reference(s)	<div> POL-0005 : Manage... </div> <div> SOP-0105 : Enginee... </div>
Type of Change	Product change of shape.		
Dependent PRS #	N/A	PRS Requirement # (s)	N/A
Specification Details	N/A		

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2. DESCRIPTION OF CHANGE

The affected Aperture windows do NOT have changes to their corresponding material or window pattern; all were changed to a 3mm hexagon chip shape. This has no impact on functionality nor capability of fitting into typical TEM sample holders. Pictures below show the chip shape change. Below are exemplary old and new chip shapes of a single iteration, and are not representative of all SKUs.

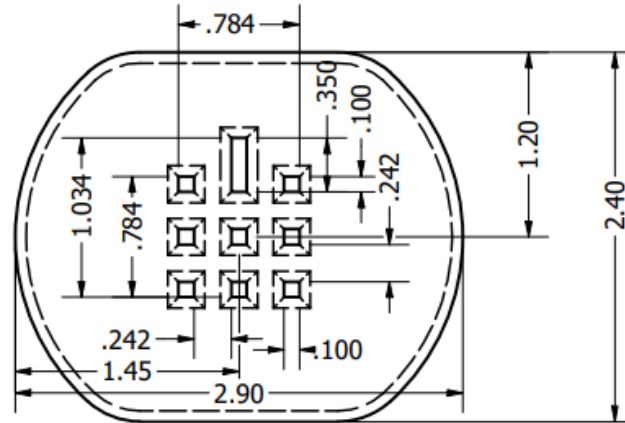
Attachments

[Drawings / Pictures](#)

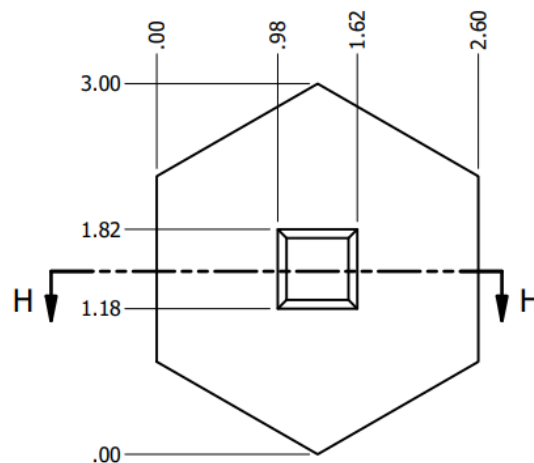
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Old Shape



New Shape



3. CUSTOMER IMPACT AND ACTIONS

Scope of change and Impact	This will change customer classification of the product, and the appearance of the chips, however it will have no impact on typical application functionality.
Recommended Action	Notification only.


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4. REASON FOR CHANGE

SiMPore has changed our TEM chip shape for multiple reasons, all positive for our customers:

1. The new format is easy to grab with 6 flat sides for a variety of tweezer styles
2. The sidewall of the chip is now vertical instead of tapered - making them more robust
3. The updated technology to produce hexagons significantly reduces debris on grids
4. Perimeter definition of the chips is greatly improved, far less variable, typically <50um

5. PRODUCT IDENTIFICATION

Old SKU	New SKU	Product Description
APT100-Q00	APT100H-Q00	silicon Window size: (1) 25x25 µm 2.9 mm hexagonal + 0.1 mm thick
APT100-Q05	APT100H-Q05	silicon Window size: (1) 50x50 µm 2.9 mm hexagonal + 0.1 mm thick
APT100-Q01	APT100H-Q01	silicon Window size: (1) 500x500 µm 2.9 mm hexagonal + 0.1 mm thick


6. PRODUCT QUALIFICATION DATA

Qualification Required?	No ▾	Responsible Dept.	n/a
Change Qualification Description	No functional changes.		
Attachments	Not Applicable ▾		

7. CUSTOMER ACKNOWLEDGEMENT

Ack. Required?	No ▾
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8. ACCEPTANCE VERIFICATION OF CHANGE

Acceptance Verification (Signature, Title, Date)	
Quality	Bruce Tolleson, Production Manager, Aug 11, 2025
Engineering	Joshua Miller, Senior Microfabrication Engineer, Aug 11, 2025
Production	James Brule, Microfabrication Engineer, 8/11/25

9. REVISION HISTORY

REVISION #	DESCRIPTION / REASON FOR CHANGE	DATE	AUTHOR
1	Initial version	8/11/25	J.Brule

10. DOCUMENT DEVELOPMENT APPROVAL

Author: James Brule	Department: Manufacturing	Date: Aug 11, 2025
Approval: Bruce Tolleson	Department: Production	Date: Aug 11, 2025
Approval: N/A	Department: N/A	Date: N/A

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