

**1. OVERVIEW**

<b>Original Issue Date</b>	<b>Apr 28, 2026</b>	<b>ECN #</b>	ECN-0069
<b>Sample Available Date</b>	All Delivered after: April 2026	<b>Product #(s)</b>	All PMC with Micro-Features: (DS/MS/MP)
<b>Effective Date</b>	<b>Apr 28, 2026</b>	<b>Product Ver.</b>	ALL
<b>Production Date</b>	All produced after: April 2026	<b>Lot # (s)</b>	All Delivered after: April 2026
<b>PO Number (s)</b>	All Delivered after: April 2026	<b>Reference(s)</b>	<ul style="list-style-type: none"> <li>▣ POL-0005 : Manage...</li> <li>▣ SOP-0105 : Enginee...</li> </ul>
<b>Type of Change</b>	Specification update		
<b>Dependent PRS #</b>	PRS-0005	<b>PRS Requirement # (s)</b>	[PREQ-6.1.3-03] [PREQ-6.1.3-04] [PREQ-6.1.4-01]
<b>Specification Details</b>	Pore diameter tolerances		

**2. DESCRIPTION OF CHANGE**

<ul style="list-style-type: none"> <li>• SiMPore is replacing the tolerance data in microns or nanometers with percentage of target diameter to match similar products on the market</li> <li>• Aligning improved manufacturability with customer expectations.</li> <li>• All features below 2 micron will now have a tolerance of 20% or higher (for features below 0.5um).             <ul style="list-style-type: none"> <li>○ Formerly these were specified as the micron unit equivalent of 20% ( 0.5um +/- 0.1um)</li> </ul> </li> <li>• All features 2 micron and above will now have a tolerance of 10%.             <ul style="list-style-type: none"> <li>○ Formerly these were specified as +/- 0.2um or 0.35um.</li> </ul> </li> </ul>	
<b>Attachments</b>	<b>Not Applicable</b>

**3. CUSTOMER IMPACT AND ACTIONS**

<b>Scope of change and Impact</b>	<ul style="list-style-type: none"> <li>• Customers may receive materials that are slightly larger or smaller in diameter than previous lots.</li> </ul>
<b>Recommended Action</b>	<ul style="list-style-type: none"> <li>• Evaluate new materials to confirm functionality in your use-case.</li> <li>• If you require a tighter tolerance or a max/min cut-off adjustment, please contact</li> </ul>

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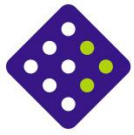
SiMPore for a quote on custom fabrication with reasonable MOQs, typically 25-50 SKUs (250-500 chips).

#### 4. REASON FOR CHANGE

- SiMPore is replacing the tolerance data in microns or nanometers with percentage of target diameter to match similar products on the market
- Aligning improved manufacturability with customer expectations.

#### 5. PRODUCT IDENTIFICATION

DSSN100.C-1LZ. 0-3.0A1	Dual Scale Silicon Nitride. 100 nm Membrane Thickness. 5.4 mm x 5.4 mm Orthogonal corners, vertical sidewall. 1 Rectangular Window, 2.0 ± 0.02 mm by 0.70 ± 0.02 mm. Pore Diameter, 3.0um ± 10%. Porosity ± error: 0.63% ± 0.063%.
DSSN100.C-1LZ. 0-5.0B2	Dual Scale Silicon Nitride. 100 nm Membrane Thickness. 5.4 mm x 5.4 mm Orthogonal corners, vertical sidewall. 1 Rectangular Window, 2.0 ± 0.02 mm by 0.70 ± 0.02 mm. Pore Diameter, 5.0um ± 10%. Porosity ± error: 1.86% ± 0.19%.
DSSN100.C-2LZ. 4-3.0A1	Dual Scale Silicon Nitride. 100 nm Membrane Thickness. 5.4 mm x 5.4 mm Orthogonal corners, vertical sidewall. 2 Rectangular Windows, 2.0 ± 0.02 mm by 0.70 ± 0.02 mm, 1.33 mm Spacing. Pore Diameter, 3.0um ± 10% Pore Diameter. Porosity ± error: 0.63% ± 0.063%.
MPSN400.C-3LX. 1-0.5D1	Microporous Silicon Nitride. 400 nm Membrane Thickness. 5.4 mm x 5.4 mm Frame with Orthogonal corners, vertical sidewall. 3 Rectangular Windows, 3.0 ± 0.02 mm by 0.70 ± 0.02 mm, 0.5 mm Spacing. Pore Diameter, 0.5um ± 20% um. Porosity ± error: 5% ± 0.5%
MPSN400.C-3LX. 1-0.5L1	Microporous Silicon Nitride. 400 nm Membrane Thickness. 5.4 mm x 5.4 mm Frame with Orthogonal corners, vertical sidewall. 3 Rectangular Windows, 3.0 ± 0.02 mm by 0.70 ± 0.02 mm, 0.5 mm Spacing. Pore Diameter, 0.5um ± 20%. Porosity ± error: 20% ± 0.5%



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MPSN400.C-3LX. 1-3.0D1	Microporous Silicon Nitride. 400 nm Membrane Thickness. 5.4 mm x 5.4 mm Frame with Orthogonal corners, vertical sidewall. 3 Rectangular Windows, 3.0 ± 0.02 mm by 0.70 ± 0.02 mm, 0.5 mm Spacing. Pore Diameter, 3.0um ± 10%. Porosity ± error: 5% ± 0.5%
MPSN400.C-3LX. 1-3.0L1	Microporous Silicon Nitride. 400 nm Membrane Thickness. 5.4 mm x 5.4 mm Frame with Orthogonal corners, vertical sidewall. 3 Rectangular Windows, 3.0 ± 0.02 mm by 0.70 ± 0.02 mm, 0.5 mm Spacing. Pore Diameter, 3.0um ± 10%. Porosity ± error: 20% ± 0.5%
MPSN400.E-1Q2 0.0-0.5D1	Microporous Silicon Nitride. 400 nm Membrane Thickness. 5.4 mm x 5.4 mm Frame with Orthogonal corners, vertical sidewall. 1 Square Window, 2.0 ± 0.02 mm by 2.0 ± 0.02 mm, Single Slot (NA) Spacing. Pore Diameter, 0.5um ± 20%. Porosity ± error: 5% ± 0.5%.
MPSN400.E-1Q2 0.0-0.5L1	Microporous Silicon Nitride. 400 nm Membrane Thickness. 5.4 mm x 5.4 mm Frame with Orthogonal corners, vertical sidewall. 1 Square Window, 2.0 ± 0.02 mm by 2.0 ± 0.02 mm, Single Slot (NA) Spacing. Pore Diameter, 0.5um ± 20%. Porosity ± error: 20% ± 0.5%.
MPSN400.E-1Q2 0.0-3.0D1	Microporous Silicon Nitride. 400 nm Membrane Thickness. 5.4 mm x 5.4 mm Frame with Orthogonal corners, vertical sidewall. 1 Square Window, 2.0 ± 0.02 mm by 2.0 ± 0.02 mm, Single Slot (NA) Spacing. Pore Diameter, 3.0um ± 10%. Porosity ± error: 5% ± 0.5%.
MPSN400.E-1Q2 0.0-3.0L1	Microporous Silicon Nitride. 400 nm Membrane Thickness. 5.4 mm x 5.4 mm Frame with Orthogonal corners, vertical sidewall. 1 Square Window, 2.0 ± 0.02 mm by 2.0 ± 0.02 mm, Single Slot (NA) Spacing. Pore Diameter, 3.0um ± 10%. Porosity ± error: 20% ± 0.5%.
MPSN400.E-1Q2 0.0-5.0D1	Microporous Silicon Nitride. 400 nm Membrane Thickness. 5.4 mm x 5.4 mm Frame with Orthogonal corners, vertical sidewall. 1 Square Window, 2.0 ± 0.02 mm by 2.0 ± 0.02 mm, Single Slot (NA) Spacing. Pore Diameter, 5.0um ± 10%. Porosity ± error: 5% ± 0.5%.
MPSN400.E-1Q2 0.0-8.0D1	Microporous Silicon Nitride. 400 nm Membrane Thickness. 5.4 mm x 5.4 mm Frame with Orthogonal corners, vertical sidewall. 1 Square Window, 2.0 ± 0.02 mm by 2.0 ± 0.02 mm, Single Slot (NA) Spacing. Pore Diameter, 8.0um ± 10%. Porosity ± error: 5% ± 0.5%.
MPSN1000.C-1Q 30.0-20.0P1	Microporous Silicon Nitride. 1000 nm Membrane Thickness. 5.4 mm x 5.4 mm Frame with Orthogonal corners, vertical sidewall. 1 Square Window, 3.0 ± 0.02 mm by 3.0 ± 0.02 mm, Single Slot (NA) Spacing. Pore Diameter, 20.0um ± 10%. Porosity ± error: 27.7% ± 0.5%.
MSSN400.C-3LX. 1-0.35D2	Microslit Silicon Nitride. 400 nm Membrane Thickness. 5.4 mm x 5.4 mm Frame with Orthogonal corners, vertical sidewall. 3 Rectangular Windows, 3.0 ± 0.02 mm by 0.70 ± 0.02 mm, 0.5 mm Spacing. Pore Diameter, 0.35um ± 40%. Porosity ± error: 9% ± 0.5%.

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MSSN400.C-3LX. 1-0.5E1	Microslit Silicon Nitride. 400 nm Membrane Thickness. 5.4 mm x 5.4 mm Frame with Orthogonal corners, vertical sidewall. 3 Rectangular Windows, 3.0 ± 0.02 mm by 0.70 ± 0.02 mm, 0.5 mm Spacing. Pore Diameter, 0.5um ± 20%. Porosity ± error: 10% ± 0.5%.
MSSN400.C-3LX. 1-1.0E2	Microslit Silicon Nitride. 400 nm Membrane Thickness. 5.4 mm x 5.4 mm Frame with Orthogonal corners, vertical sidewall. 3 Rectangular Windows, 3.0 ± 0.02 mm by 0.70 ± 0.02 mm, 0.5 mm Spacing. Pore Diameter, 1um ± 20%. Porosity ± error: 11% ± 0.5%.
MSSN400.C-3LX. 1-2.0K2	Microslit Silicon Nitride. 400 nm Membrane Thickness. 5.4 mm x 5.4 mm Frame with Orthogonal corners, vertical sidewall. 3 Rectangular Windows, 3.0 ± 0.02 mm by 0.70 ± 0.02 mm, 0.5 mm Spacing. Pore Diameter, 2um ± 10%. Porosity ± error: 16.7% ± 0.5%.
MSSN400.C-3LX. 1-4.0K2	Microslit Silicon Nitride. 400 nm Membrane Thickness. 5.4 mm x 5.4 mm Frame with Orthogonal corners, vertical sidewall. 3 Rectangular Windows, 3.0 ± 0.02 mm by 0.70 ± 0.02 mm, 0.5 mm Spacing. Pore Diameter, 4.0um ± 10%. Porosity ± error: 16.7% ± 0.5%.
MSSN400.C-3LX. 1-8.0K2	Microslit Silicon Nitride. 400 nm Membrane Thickness. 5.4 mm x 5.4 mm Frame with Orthogonal corners, vertical sidewall. 3 Rectangular Windows, 3.0 ± 0.02 mm by 0.70 ± 0.02 mm, 0.5 mm Spacing. Pore Diameter, 8.0um ± 10%. Porosity ± error: 16.7% ± 0.5%.

### 6. PRODUCT QUALIFICATION DATA

Qualification Required?	<b>Yes</b> ▾	Responsible Dept.	<b>Production</b> ▾
Change Qualification Description	<ul style="list-style-type: none"> <li>Documentation updates: See ECN-0069 for details (Internal Only)</li> </ul>		
Attachments	<b>Not Applicable</b> ▾		

### 7. CUSTOMER ACKNOWLEDGEMENT

Ack. Required?	<b>Yes</b> ▾
Customer accepts new tolerance scheme and understand that they can still obtain different material than our standard PMC inventory via custom ordering.	

### 8. ACCEPTANCE VERIFICATION OF CHANGE

<b>Acceptance Verification (Signature, Title, Date)</b>	
Quality	Teagan Horan , Applications Scientist, Apr 28, 2026

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<b>Engineering</b>	Mohammed Omar , Microfabrication Engineer, Apr 28, 2026
<b>Production</b>	Joshua Miller , Senior Microfabrication Engineer, Apr 28, 2026

### 9. REVISION HISTORY

REVISION #	DESCRIPTION / REASON FOR CHANGE	DATE	AUTHOR
1	Initial version	04/28/2026	J. Miller
2	Added Updated descriptions of current SKUs	6/8/2026	J. Miller

### 10. RECORD APPROVAL

Author: Joshua Miller	Department: Manufacturing	Date: Jun 8, 2026
Approval: James Brule	Department: Manufacturing	Date: Jun 11, 2026
Approval: N/A	Department: N/A	Date: N/A

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