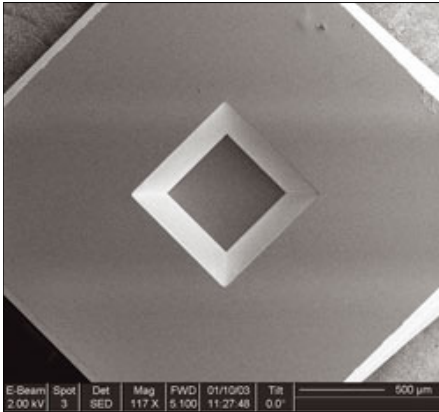


Silicon Nitride Windows for TEM



TAAB introduces a new generation of British Made Silicon Nitride Support Films for EM imaging and analysis from Silson. These resilient, ultra-smooth low stress inorganic SiN support films have been developed to enable specific nanotechnology and molecular biology research and are manufactured using the latest state-of-the-art semiconductor and MEMS fabrication techniques.

Silicon nitride support films have the great advantages of being chemically and mechanically robust and able to withstand temperature changes up to 1000°C. They are extremely stable and suitable to conduct a variety of nanotechnology experiments with particles or cells mounted directly on the support films. They provide a carbon-free, low background TEM support film. The frame is manufactured as a **3mm x 200µm silicon disc** free from debris and will fit perfectly in standard TEM holders (**a 100µm thick frame is an option**).

The specimen viewing area is created by **etching away a window** in the silicon wafer substrate underneath the Si₃N₄ membrane, leaving a perfectly smooth, resilient and chemically robust silicon nitride film.

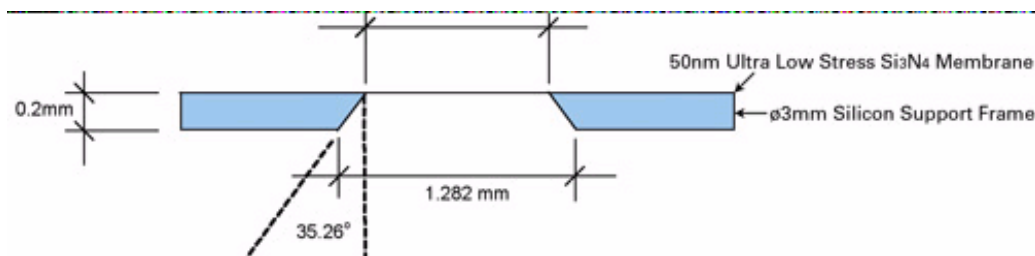
SiN is naturally hydrophobic but can be made temporarily hydrophilic with air or oxygen plasma treatment.

Benefits of SiN Windows

- High resistance to temperature, acids, bases and solvents
- Clean, ultra-flat, high planarity, low background, low scattering
- Large viewing area without obstruction across the entire window
- Carbon free and plasma cleanable

Choosing which membrane to use

For higher resolution, thinner membranes (10-20nm) are to be preferred, but for more physically demanding specimens and procedures 30-50nm windows should be tried. As with any support, the larger and thinner the film (window) the more vulnerable it will be, so it is best to start with smaller, thicker, stronger windows until you refine your procedures and can move to larger, thinner less robust ones. Your own practical requirements will eventually determine which is best for you.



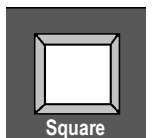
The structure of the silicon and the etching process dictates that the window in the silicon substrate is **etched with a 35° angle**, leaving a much larger opening than the membrane window at the back of the frame.

Effects of tilt

Due to the 35° etching angle the Si₃N₄ support films on the frames can be tilted to 35° for unobstructed viewing, even if the specimen is close to the edge of the membrane. For higher tilting angles, the specimen needs to be in the centre of the membrane. To allow for the highest possible tilt angle a window size of 1.5 x 0.5mm has been made available which allows for tilting angles up to 70° with a viewable area of 40%. Maximum tilt angle with a specimen in the centre is 75°.

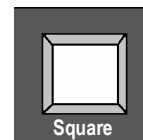
Porous Silicon Nitride Windows 30nm in 200µm Thick Frames

W177/10	Porous SiN 30nm membrane 1.5 x 1.5mm square with 2µm holes (4µm pitch) in 200µm thick frame 2.65mm square (TEM100113-10) pack of 10
W177/25	Porous SiN 30nm membrane 1.5 x 1.5mm square with 2µm holes (4µm pitch) in 200µm thick frame 2.65mm square (TEM100113-25) pack of 25
W177/100	Porous SiN 30nm membrane 1.5 x 1.5mm square with 2µm holes (4µm pitch) in 200µm thick frame 2.65mm square (TEM100113-100) pack of 100



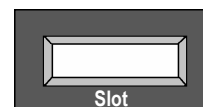
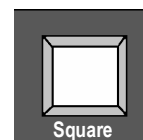
Silicon Nitride Windows **10nm** in 200µm Thick Frames

W110/10	SiN 10nm membrane 0.1 x 0.1mm square in 200µm thick frame (TEM-100001-10), pack of 10
W110/25	SiN 10nm membrane 0.1 x 0.1mm square in 200µm thick frame (TEM-100001-25), pack of 25
W110/100	SiN 10nm membrane 0.1 x 0.1mm square in 200µm thick frame (TEM-100001-100) pack of 100
W111/10	SiN 10nm membrane 0.25 x 0.25mm square in 200µm thick frame (TEM-100010-10), pack of 10
W111/25	SiN 10nm membrane 0.25 x 0.25mm square in 200µm thick frame (TEM-100010-25), pack of 25
W111/100	SiN 10nm membrane 0.25 x 0.25mm square in 200µm thick frame (TEM-100010-100), pack of 100
W112/10	SiN 10nm membrane 0.5 x 0.5mm square in 200µm thick frame (TEM-100019-10), pack of 10
W112/25	SiN 10nm membrane 0.5 x 0.5mm square in 200µm thick frame (TEM-100019-25), pack of 25
W112/100	SiN 10nm membrane 0.5 x 0.5mm square in 200µm thick frame (TEM-100019-100), pack of 100



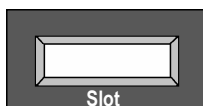
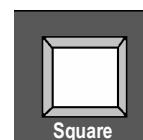
Silicon Nitride Windows **20nm** in 200µm Thick Frames

W113/10	SiN 20nm membrane 0.1 x 0.1mm square in 200µm thick frame (TEM-100002-10), pack of 10
W113/25	SiN 20nm membrane 0.1 x 0.1mm square in 200µm thick frame (TEM-100002-25), pack of 25
W113/100	SiN 20nm membrane 0.1 x 0.1mm square in 200µm thick frame (TEM-100002-100), pack of 100
W114/10	SiN 20nm membrane 0.25 x 0.25mm square in 200µm thick frame (TEM-100011-10), pack of 10
W114/25	SiN 20nm membrane 0.25 x 0.25mm square in 200µm thick frame (TEM-100011-25), pack of 25
W114/100	SiN 20nm membrane 0.25 x 0.25mm square in 200µm thick frame (TEM-100011-100), pack of 100
W115/10	SiN 20nm membrane 0.5 x 0.5mm square in 200µm thick frame (TEM-100020-10), pack of 10
W115/25	SiN 20nm membrane 0.5 x 0.5mm square in 200µm thick frame (TEM-100020-25), pack of 25
W115/100	SiN 20nm membrane 0.5 x 0.5mm square in 200µm thick frame (TEM-100020-100), pack of 100
W116/10	SiN 20nm membrane 1.0 x 1.0mm square in 200µm thick frame (TEM-100028-10), pack of 10
W116/25	SiN 20nm membrane 1.0 x 1.0mm square in 200µm thick frame (TEM-100028-25), pack of 25
W116/100	SiN 20nm membrane 1.0 x 1.0mm square in 200µm thick frame (TEM-100028-100), pack of 100
W117/10	SiN 20nm membrane 1.0 x 0.25mm slot in 200µm thick frame (TEM-100036-10), pack of 10
W117/25	SiN 20nm membrane 1.0 x 0.25mm slot in 200µm thick frame (TEM-100036-25), pack of 25
W117/100	SiN 20nm membrane 1.0 x 0.25mm slot in 200µm thick frame (TEM-100036-100) pack of 100



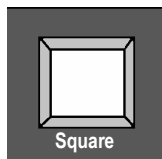
Silicon Nitride Windows **30nm** in 200µm Thick Frames

W118/10	SiN 30nm membrane 0.1 x 0.1mm square in 200µm thick frame (TEM-100003-10), pack of 10
W118/25	SiN 30nm membrane 0.1 x 0.1mm square in 200µm thick frame (TEM-100003-25), pack of 25
W118/100	SiN 30nm membrane 0.1 x 0.1mm square in 200µm thick frame (TEM-100003-100), pack of 100
W119/10	SiN 30nm membrane 0.25 x 0.25mm square in 200µm thick frame (TEM-100012-10), pack of 10
W119/25	SiN 30nm membrane 0.25 x 0.25mm square in 200µm thick frame (TEM-100012-25), pack of 25
W119/100	SiN 30nm membrane 0.25 x 0.25mm square in 200µm thick frame (TEM-100012-100), pack of 100
W120/10	SiN 30nm membrane 0.5 x 0.5mm square in 200µm thick frame (TEM-100021-10), pack of 10
W120/100	SiN 30nm membrane 0.5 x 0.5mm square in 200µm thick frame (TEM-100021-25), pack of 25
W120/100	SiN 30nm membrane 0.5 x 0.5mm square in 200µm thick frame (TEM-100021-100), pack of 100
W121/10	SiN 30nm membrane 1.0 x 1.0mm square in 200µm thick frame (TEM-100029-10), pack of 10
W121/25	SiN 30nm membrane 1.0 x 1.0mm square in 200µm thick frame (TEM-100029-25), pack of 25
W121/100	SiN 30nm membrane 1.0 x 1.0mm square in 200µm thick frame (TEM-100029-100), pack of 100
W122/10	SiN 30nm membrane 1.0 x 0.25mm Slot in 200µm thick frame (TEM-100037-10), pack of 10
W122/25	SiN 30nm membrane 1.0 x 0.25mm Slot in 200µm thick frame (TEM-100037-25), pack of 25
W122/100	SiN 30nm membrane 1.0 x 0.25mm Slot in 200µm thick frame (TEM-100037-100), pack of 100



SiN windows are packed in Gilder Grid boxes for secure storage and transit

Silicon Nitride Windows 50nm in 200µm Thick Frames



W123/10
W123/25
W123/100

SiN 50nm membrane 0.1 x 0.1mm square in 200µm thick frame (TEM-100004-10), pack of 10
SiN 50nm membrane 0.1 x 0.1mm square in 200µm thick frame (TEM-100004-25), pack of 25
SiN 50nm membrane 0.1 x 0.1mm square in 200µm thick frame (TEM-100004-100), pack of 100

W124/10
W124/25
W124/100

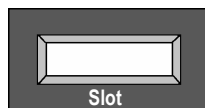
SiN 50nm membrane 0.25 x 0.25mm square in 200µm thick frame (TEM-100013-10), pack of 10
SiN 50nm membrane 0.25 x 0.25mm square in 200µm thick frame (TEM-100013-25), pack of 25
SiN 50nm membrane 0.25 x 0.25mm square in 200µm thick frame (TEM-100013-100), pack of 100

W125/10
W125/25
W125/100

SiN 50nm membrane 0.5 x 0.5mm square in 200µm thick frame (TEM-100022-10), pack of 10
SiN 50nm membrane 0.5 x 0.5mm square in 200µm thick frame (TEM-100022-25), pack of 25
SiN 50nm membrane 0.5 x 0.5mm square in 200µm thick frame (TEM-100022-100), pack of 100

W126/10
W126/25
W126/100

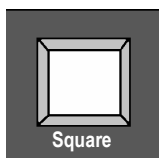
SiN 50nm membrane 1.0 x 1.0mm square in 200µm thick frame (TEM-100030-10), pack of 10
SiN 50nm membrane 1.0 x 1.0mm square in 200µm thick frame (TEM-100030-25), pack of 25
SiN 50nm membrane 1.0 x 1.0mm square in 200µm thick frame (TEM-100030-100), pack of 100



W127/10
W127/25
W127/100

SiN 50nm membrane 1.0 x 0.25mm slot in 200µm thick frame (TEM-100038-10), pack of 10
SiN 50nm membrane 1.0 x 0.25mm slot in 200µm thick frame (TEM-100038-25), pack of 25
SiN 50nm membrane 1.0 x 0.25mm slot in 200µm thick frame (TEM-100038-100), pack of 100

Silicon Nitride Windows 75nm in 200µm Thick Frames



W129/10
W129/25
W129/100

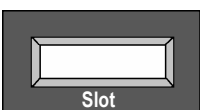
SiN 75nm membrane 0.25 x 0.25mm square in 200µm thick frame (TEM-100014-10), pack of 10
SiN 75nm membrane 0.25 x 0.25mm square in 200µm thick frame (TEM-100014-25), pack of 25
SiN 75nm membrane 0.25 x 0.25mm square in 200µm thick frame (TEM-100014-100), pack of 100

W130/10
W130/25
W130/100

SiN 75nm membrane 0.5 x 0.5mm square in 200µm thick frame (TEM-100023-10), pack of 10
SiN 75nm membrane 0.5 x 0.5mm square in 200µm thick frame (TEM-100023-25), pack of 25
SiN 75nm membrane 0.5 x 0.5mm square in 200µm thick frame (TEM-100023-100), pack of 100

W131/10
W131/25
W131/100

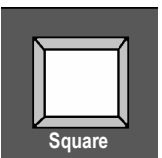
SiN 75nm membrane 1.0 x 1.0mm square in 200µm thick frame (TEM-100031-10), pack of 10
SiN 75nm membrane 1.0 x 1.0mm square in 200µm thick frame (TEM-100031-25), pack of 25
SiN 75nm membrane 1.0 x 1.0mm square in 200µm thick frame (TEM-100031-100), pack of 100



W132/10
W132/25
W132/100

SiN 75nm membrane 1.0 x 0.25mm slot in 200µm thick frame (TEM-100039-10), pack of 10
SiN 75nm membrane 1.0 x 0.25mm slot in 200µm thick frame (TEM-100039-25), pack of 25
SiN 75nm membrane 1.0 x 0.25mm slot in 200µm thick frame (TEM-100039-100), pack of 100

Silicon Nitride Windows 100nm in 200µm Thick Frames

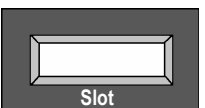


W133/10
W133/25
W133/100

SiN 100nm membrane 0.1 x 0.1mm square in 200µm thick frame (TEM-100006-10), pack of 10
SiN 100nm membrane 0.1 x 0.1mm square in 200µm thick frame (TEM-100006-25), pack of 25
SiN 100nm membrane 0.1 x 0.1mm square in 200µm thick frame (TEM-100006-100), pack of 100

W134/10
W134/25
W134/100

SiN 100nm membrane 0.25 x 0.25mm square in 200µm thick frame (TEM-100015-10), pack of 10
SiN 100nm membrane 0.25 x 0.25mm square in 200µm thick frame (TEM-100015-25), pack of 25
SiN 100nm membrane 0.25 x 0.25mm square in 200µm thick frame (TEM-100015-100), pack of 100



W135/10
W135/25
W135/100

SiN 100nm membrane 0.5 x 0.5mm slot in 200µm thick frame (TEM-100024-10), pack of 10
SiN 100nm membrane 0.5 x 0.5mm slot in 200µm thick frame (TEM-100024-25), pack of 25
SiN 100nm membrane 0.5 x 0.5mm slot in 200µm thick frame (TEM-100024-100), pack of 100

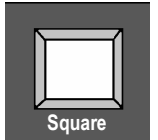
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Grids & Specimen Supports

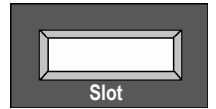
1

Silicon Nitride Windows **100nm** in 200µm Thick Frames Cont...

W136/10 SiN 100nm membrane 1.0 x 1.0mm **square** in 200µm thick frame (TEM-100032-10), pack of 10
W136/25 SiN 100nm membrane 1.0 x 1.0mm square in 200µm thick frame (TEM-100032-25), pack of 25
W136/100 SiN 100nm membrane 1.0 x 1.0mm square in 200µm thick frame (TEM-100032-100) pack of 100



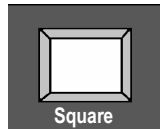
W137/10 SiN 100nm membrane 1.0 x 0.25mm **slot** in 200µm thick frame (TEM-100040-10), pack of 10
W137/25 SiN 100nm membrane 1.0 x 0.25mm slot in 200µm thick frame (TEM-100040-25), pack of 25
W137/100 SiN 100nm membrane 1.0 x 0.25mm slot in 200µm thick frame (TEM-100040-100) pack of 100



Silicon Nitride Windows **150nm** in 200µm Thick Frames

W138/10 SiN 150nm membrane 0.1 x 0.1mm **square** in 200µm thick frame (TEM-100007-10), pack of 10
W138/25 SiN 150nm membrane 0.1 x 0.1mm square in 200µm thick frame (TEM-100007-25), pack of 25
W138/100 SiN 150nm membrane 0.1 x 0.1mm square in 200µm thick frame (TEM-100007-100), pack of 100

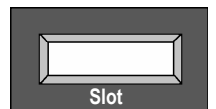
W139/10 SiN 150nm membrane 0.25 x 0.25mm **square** in 200µm thick frame (TEM-100016-10), pack of 10
W139/25 SiN 150nm membrane 0.25 x 0.25mm square in 200µm thick frame (TEM-100016-25), pack of 25
W139/100 SiN 150nm membrane 0.25 x 0.25mm square in 200µm thick frame (TEM-100016-100), pack of 100



W140/10 SiN 150nm membrane 0.5 x 0.5mm **square** in 200µm thick frame (TEM-100025-10), pack of 10
W140/25 SiN 150nm membrane 0.5 x 0.5mm square in 200µm thick frame (TEM-100025-25), pack of 25
W140/100 SiN 150nm membrane 0.5 x 0.5mm square in 200µm thick frame (TEM-100025-100), pack of 100

W141/10 SiN 150nm membrane 1.0 x 1.0mm **square** in 200µm thick frame (TEM-100033-10), pack of 10
W141/25 SiN 150nm membrane 1.0 x 1.0mm square in 200µm thick frame (TEM-100033-25), pack of 10
W141/100 SiN 150nm membrane 1.0 x 1.0mm square in 200µm thick frame (TEM-100033-100), pack of 100

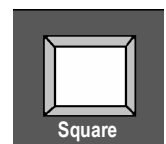
W142/10 SiN 150nm membrane 1.0 x 0.25mm **slot** in 200µm thick frame (TEM-100041-10), pack of 10
W142/25 SiN 150nm membrane 1.0 x 0.25mm slot in 200µm thick frame (TEM-100041-25), pack of 25
W142/100 SiN 150nm membrane 1.0 x 0.25mm slot in 200µm thick frame (TEM-100041-100) pack of 100



Silicon Nitride Windows **200nm** in 200µm Thick Frames

W143/10 SiN 200nm membrane 0.1 x 0.1mm **square** in 200µm thick frame (TEM-100008-10), pack of 10
W143/25 SiN 200nm membrane 0.1 x 0.1mm square in 200µm thick frame (TEM-100008-25), pack of 25
W143/100 SiN 200nm membrane 0.1 x 0.1mm **square** in 200µm thick frame (TEM-100008-100) pack of 100

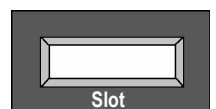
W144/10 SiN 200nm membrane 0.25 x 0.25mm **square** in 200µm thick frame (TEM-100017-10), pack of 10
W144/25 SiN 200nm membrane 0.25 x 0.25mm square in 200µm thick frame (TEM-100017-25), pack of 25
W144/100 SiN 200nm membrane 0.25 x 0.25mm square in 200µm thick frame (TEM-100017-100) pack of 100



W145/10 SiN 200nm membrane 0.5 x 0.5mm **square** in 200µm thick frame (TEM-100026-10), pack of 10
W145/25 SiN 200nm membrane 0.5 x 0.5mm square in 200µm thick frame (TEM-100026-25), pack of 25
W145/100 SiN 200nm membrane 0.5 x 0.5mm square in 200µm thick frame (TEM-100026-100) pack of 100

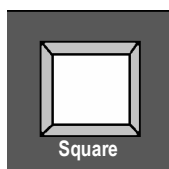
W146/10 SiN 200nm membrane 1.0 x 1.0mm **square** in 200µm thick frame (TEM-100034-10), pack of 10
W146/25 SiN 200nm membrane 1.0 x 1.0mm square in 200µm thick frame (TEM-100034-25), pack of 25
W146/100 SiN 200nm membrane 1.0 x 1.0mm square in 200µm thick frame (TEM-100034-100) pack of 100

W147/10 SiN 100nm membrane 1.0 x 0.25mm **slot** in 200µm thick frame (TEM-100042-10), pack of 10
W147/25 SiN 100nm membrane 1.0 x 0.25mm slot in 200µm thick frame (TEM-100042-25), pack of 25
W147/100 SiN 100nm membrane 1.0 x 0.25mm slot in 200µm thick frame (TEM-100042-100) pack of 100



Silicon Nitride Windows 500nm in 200µm Thick Frames

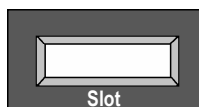
W148/10 SiN 500nm membrane 0.1 x 0.1mm square in 200µm thick frame (TEM-100009-10), pack of 10
 W148/25 SiN 500nm membrane 0.1 x 0.1mm square in 200µm thick frame (TEM-100009-25), pack of 25
 W148/100 SiN 500nm membrane 0.1 x 0.1mm square in 200µm thick frame (TEM-100009-100), pack of 100



W149/10 SiN 500nm membrane 0.25 x 0.25mm square in 200µm thick frame (TEM-100018-10), pack of 10
 W149/25 SiN 500nm membrane 0.25 x 0.25mm square in 200µm thick frame (TEM-100018-25), pack of 25
 W149/100 SiN 500nm membrane 0.25 x 0.25mm square in 200µm thick frame (TEM-100018-100), pack of 100

W150/10 SiN 500nm membrane 0.5 x 0.5mm square in 200µm thick frame (TEM-100025-10), pack of 10
 W150/25 SiN 500nm membrane 0.5 x 0.5mm square in 200µm thick frame (TEM-100025-25), pack of 25
 W150/100 SiN 500nm membrane 0.5 x 0.5mm square in 200µm thick frame (TEM-100025-100), pack of 100

W151/10 SiN 500nm membrane 1.0 x 1.0mm square in 200µm thick frame (TEM-100035-100), pack of 10
 W151/25 SiN 500nm membrane 1.0 x 1.0mm square in 200µm thick frame (TEM-100035-25), pack of 10
 W151/100 SiN 500nm membrane 1.0 x 1.0mm square in 200µm thick frame (TEM-100035-100), pack of 100



W152/10 SiN 500nm membrane 1.0 x 0.25mm slot in 200µm thick frame (TEM-100043-10), pack of 10
 W152/25 SiN 500nm membrane 1.0 x 0.25mm slot in 200µm thick frame (TEM-100043-25), pack of 25
 W152/100 SiN 500nm membrane 1.0 x 0.25mm slot in 200µm thick frame (TEM-100043-100) pack of 100

Silicon Nitride Membrane Multi-Frame Arrays



Multi-frame arrays (MFAs) have been developed as an intermediate product between individual membrane windows and intact lithography wafers. They are useful for nanotechnology projects using a variety of microscopy methods prior to the selection of individual windows for TEM.

MFAs consist of an outer silicon frame 200µm thick which can contain any of the following sub-arrays:

MFA 1 7 x 7 array of TEM frames contained within a 23.5 mm x 23.5 mm outer silicon frame
 MFA 2 5 x 5 array of TEM frames contained within a 17.5 mm x 17.5 mm outer silicon frame
 MFA 3 4 x 4 array of TEM frames contained within a 14.0 mm x 10.0 mm outer silicon frame

Each individual frame within the sub-array will contain a centred standard silicon nitride membrane.

Silicon Nitride MFA1, 7 x 7 Arrays in 200µm Thick Frames

W153	SiN 7 x 7 Multi-frame array of 0.5mm squares with 20nm windows, (TEM-100087)	each
W154	SiN 7 x 7 Multi-frame array of 0.5mm squares with 30nm windows, (TEM-100088)	each
W155	SiN 7 x 7 Multi-frame array of 0.5mm squares with 50nm windows, (TEM-100089)	each
W156	SiN 7 x 7 Multi-frame array of 0.5mm squares with 75nm windows, (TEM-100090)	each
W157	SiN 7 x 7 Multi-frame array of 0.5mm squares with 100nm windows, (TEM-100091)	each
W158	SiN 7 x 7 Multi-frame array of 0.5mm squares with 150nm windows, (TEM-100092)	each
W159	SiN 7 x 7 Multi-frame array of 0.5mm squares with 200nm windows, (TEM-100093)	each
W160	SiN 7 x 7 Multi-frame array of 0.5mm squares with 500nm windows, (TEM-100094)	each

Silicon Nitride MFA2, 5 x 5 Arrays in 200µm Thick Frames

W161	SiN 5 x 5 Multi-frame array of 0.5mm squares with 20nm windows, (TEM-100095)	each
W162	SiN 5 x 5 Multi-frame array of 0.5mm squares with 30nm windows, (TEM-100096)	each
W163	SiN 5 x 5 Multi-frame array of 0.5mm squares with 50nm windows, (TEM-100097)	each
W164	SiN 5 x 5 Multi-frame array of 0.5mm squares with 75nm windows, (TEM-100098)	each
W165	SiN 5 x 5 Multi-frame array of 0.5mm squares with 100nm windows, (TEM-100099)	each
W166	SiN 5 x 5 Multi-frame array of 0.5mm squares with 150nm windows, (TEM-100100)	each
W167	SiN 5 x 5 Multi-frame array of 0.5mm squares with 200nm windows, (TEM-100101)	each
W168	SiN 5 x 5 Multi-frame array of 0.5mm squares with 500nm windows, (TEM-100102)	each

Silicon Nitride Membrane Multi-Frame Arrays cont....

Silicon Nitride **MFA3, 4 x 4 Arrays** in 200µm Thick Frames

W169	SiN 4 x 4 Multi-frame array of 0.5mm squares with 20nm windows , (TEM-100103)	each
W170	SiN 4 x 4 Multi-frame array of 0.5mm squares with 30nm windows , (TEM-100104)	each
W171	SiN 4 x 4 Multi-frame array of 0.5mm squares with 50nm windows , (TEM-100105)	each
W172	SiN 4 x 4 Multi-frame array of 0.5mm squares with 75nm windows , (TEM-100106)	each
W173	SiN 4 x 4 Multi-frame array of 0.5mm squares with 100nm windows , (TEM-100107)	each
W174	SiN 4 x 4 Multi-frame array of 0.5mm squares with 150nm windows , (TEM-100108)	each
W175	SiN 4 x 4 Multi-frame array of 0.5mm squares with 200nm windows , (TEM-100109)	each
W176	SiN 4 x 4 Multi-frame array of 0.5mm squares with 500nm windows , (TEM-100110)	each

Recommended Tweezers for Handling Silicon Nitride Windows

Whilst it is relatively safe to handle SiN windows with stainless steel tweezers it is recommended that softer tip ESD safe **replaceable tip tweezers** are used. The low carbon, austenitic stainless steel handle accepts tips made from a Polyetheretherketone (PEEK) plus a Carbon nano compound, or alternatively a carbon fibre composite. PEEK is a **colourless, semicrystalline, high temperature (up to 300°C) organic thermoplastic polymer** used in many engineering applications and the **carbon fibre** is Pa66/cf30 polyamide 66 reinforced with **30 wt% with a continuous use temp range up to 130°C**. Both are ideal for handling the SiN windows.

Tweezer Type 5 - stainless steel, anti-magnetic handle with replaceable tip. Very fine straight tips.

Dimensions: A=0.5mm, B=0.5mm, Overall length 130mm

T682 Tweezer type 5CPR with replaceable **PEEK** tip, S/S handle
T682/R New PEEK CPR tip for tweezer type 5

T683 Tweezer type 5CFR with replaceable **Carbon Fibre** tip, S/S handle
T683/R New Carbon Fibre CFR tip for tweezer type 5

Type 5 PEEK or Carbon Fibre tipped tweezers



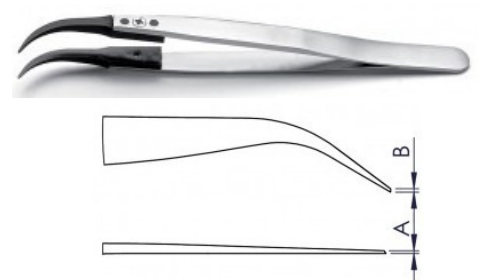
Tweezer Type 7 - stainless steel, anti-magnetic handle with replaceable tip. Very fine curved tips.

Dimensions: A=0.5mm, B=0.5mm, Overall length 130mm

T684 Tweezer type 7 CPR with replaceable **PEEK** tip, S/S handle
T684/R New PEEK CPR tip for tweezer type 7

T685 Tweezer type 7 CFR with replaceable **Carbon Fibre** tip, S/S handle
T685/R New carbon fibre CFR tip for tweezer type 7

Type 7 PEEK or Carbon Fibre tipped tweezers



Tweezer Type 246 - stainless steel, anti-magnetic handle with replaceable carbon fibre tip. Fine, thin, angled head

Dimensions: A=0.5mm, B=0.5mm, D=9.0mm, E=145°, Overall length 125mm

T686 Tweezer type 246CFR with replaceable **Carbon Fibre** tip, S/S handle
T686/R New carbon fibre tip for tweezer type 246

Type 246 Carbon Fibre tipped tweezers

