MEMS Mirror Part Number Generation

MEMS Device Part Number Generation

Format: ACTUATOR-MIRROR-PACKAGE-COVER

AAAA.A-BBBBCC-DDDD-EE/F/GG

- A: MEMS actuator Design ID (e.g.: A7M20.2)

- B: Mirror diameter in microns (e.g.: 2000, NM for no Mirror)

- C: Mirror coating (AL, AU, SI for uncoated Silicon)

- D: MEMS carrier package ID (e.g.: TINY20.4)

- E: Cover window coating selection (see "Package Cover" section)

- F: Window mounting option option: (see "Package Cover" section)

- G: Cover attachment method (see "Package Cover" section)
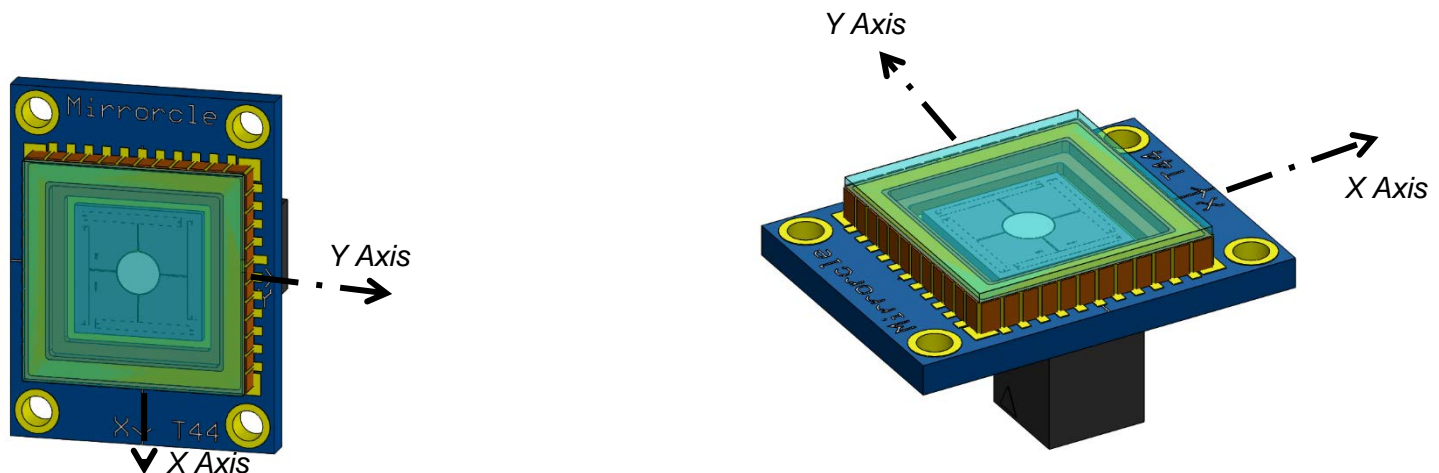
Package Cover

Cover Windows

- Five standard window options (four with double-sided AR coated and one with no AR coating):

Window Coating	Coating Range [Min]	Coating Range [Max]	AOI [°]	Transmittance [%]	P/N Section E
Type A	400 nm	675 nm	22.5°	>98%	A
Type B	675 nm	1040 nm	22.5°	>98%	B
Type C	1040 nm	1600 nm	22.5°	>98%	C
Type AB	400 nm	980 nm	22.5°	>96%	AB
No coating	400 nm	2000 nm	22.5°	>88%	NC

- All window types transmittance are specified for +/-5° from AOI (Angle of Incidence) of 22.5°, however, performance is not highly dependent on AOI.

- Customer specific wavelengths and AOI can be arranged for orders in quantities from 500 units

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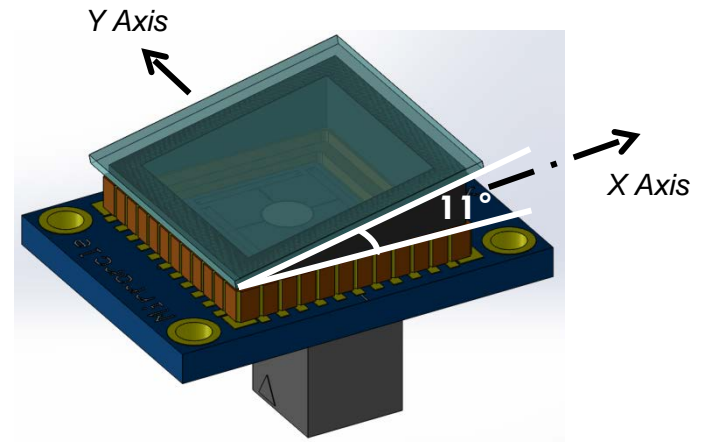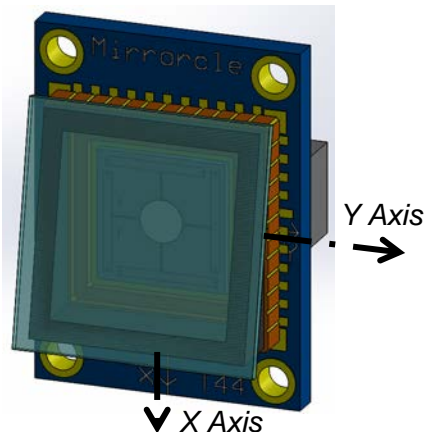
Window Mounting - Flat

- The selected window is typically mounted flat on the package, over the rim of the ceramic carrier.

- In P/N section F use: **F**

Example P/N with Flat-mounted window: A7M20.1-2000AL-TINY20.4-A/**F**/EP
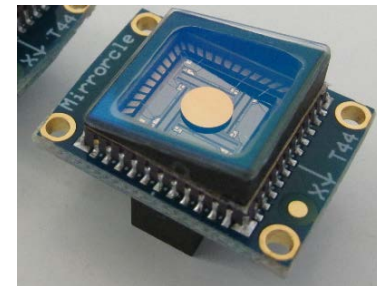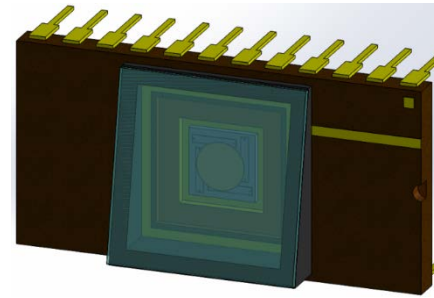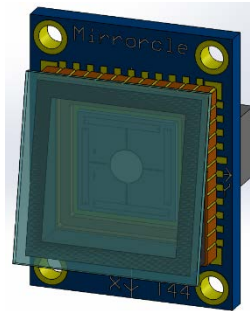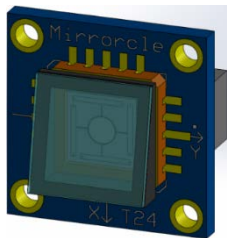
Window Mounting - Wedged Window

- The AR-coated window can be mounted on an anodized aluminum wedge with a tilt to avoid reflections from the window to appear within (near the center of) the MEMS field-of-regard.

- The standard wedge is designed with a -11° tilt about the MEMS Y Axis (negative rotation about the Y Axis, sending the residual reflection UP)
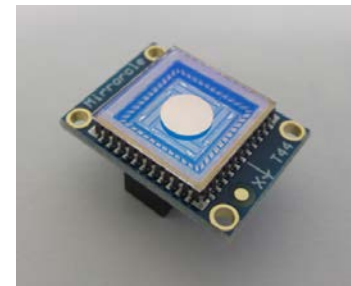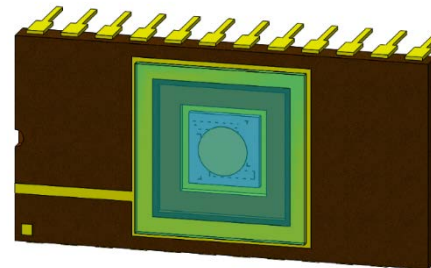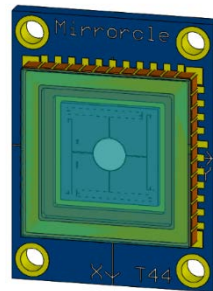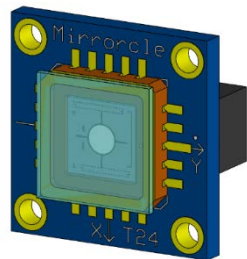
- In P/N section F use: **W**

Example P/N with Wedge-mounted window: A7M20.1-2000AL-TINY20.4-A/**W**/EP

Examples of Devices with Cover Windows

Wedge-Mounted Windows

Flat-Mounted Windows

Package Cover Attachment Options

There are 3 methods of attaching the cover to the package:

☐ Cover is permanently attached to the package using adhesive.

◻ In P/N section G use: **EP**

☐ Cover is attached to the package using double-sided tape on all 4 sides.

◻ In P/N section G use: **TP**

☐ Cover is lightly attached to the package using double-sided tape on 2 sides.

◻ In P/N section G use: **2TP**

☐ As an exception to the naming system, for customers who request temporary windows **for shipping protection only,** the cover section of the part number simply states "**TW**". Any window (uncoated or coated, no specified optical performance) is lightly attached (double-sided tape on only 2 edges) for protection of the MEMS Mirror and for easier removal.

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Thank You for Choosing

If you have any further questions or suggestions please email us:
support@mirrorcletech.com