



Hamamatsu provides a wide variety of precision glass products such as flow cells. These are designed and manufactured based on our 65 years of experience in the production of vacuum tubes such as photomultiplier tubes along with our well-established glass processing technology. We welcome your requests for custom products.

Features

- High dimensional accuracy: Minimum tolerance ± 0.005 mm
- Available in various shapes
- Materials: Synthetic silica, synthetic black quartz, etc.
- Custom products with sample inlet/outlet mechanism available

Applications

- Flow cytometry
- Blood analysis
- Imaging flow cytometry
- Particle counters

Specifications

Type No.	Material	Flow channel size (mm)	Note
J11020-000-001	Synthetic silica	$\square 0.25 \pm 0.025$	Standard type. Suitable flow channel for detecting minute particles.
-002			Grinded type. Standard type with cylindrical grinding.
-003			Standard type flow cell with a synthetic silica hemisphere lens attached by UV glue.
-006	Synthetic silica*1 Synthetic black quartz	$\square 1.0 \pm 0.025$	Synthetic black quartz glass type. Less stray light and low fluorescence from material.

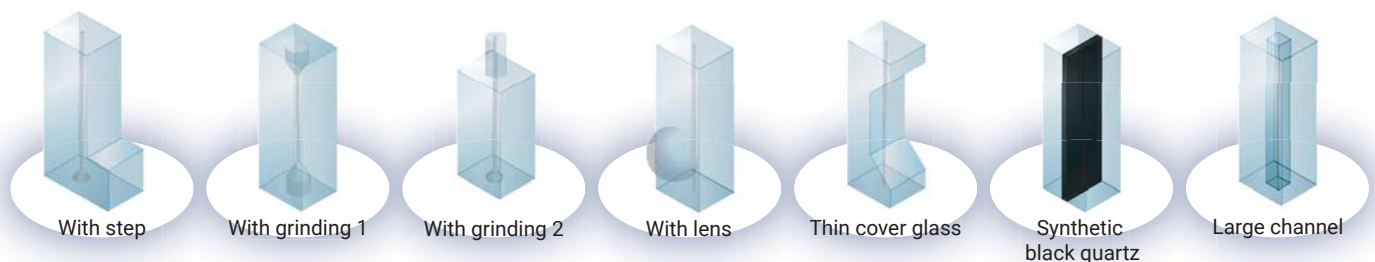
*1 : Index of refraction of synthetic silica: nC (656 nm) 1.456, nd (587 nm) 1.458, nF (486 nm) 1.463

Surface quality

Parameter	Optical effective areas	Other polished surfaces
Scratch	Width 0.004 mm Max.	Width 0.02 mm Max.
Dig	Φ 0.025 mm Max.	Φ 0.1 mm Max..
Chipping	Depth 0.025 mm Max.	Depth 0.1 mm Max.

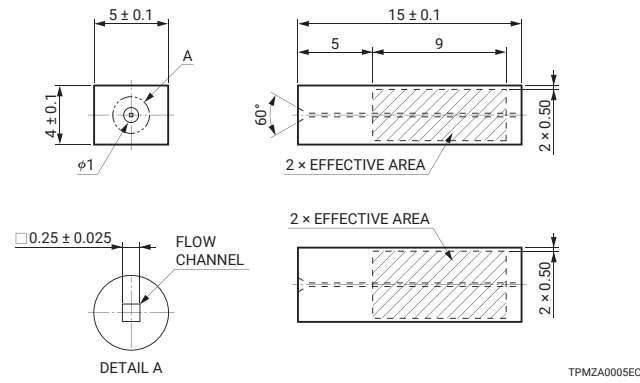
Customization

High quality synthetic silica flow cells

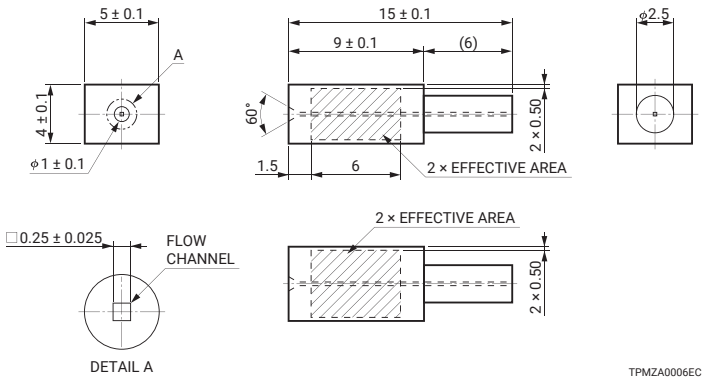


Dimensional outline (Unit: mm)

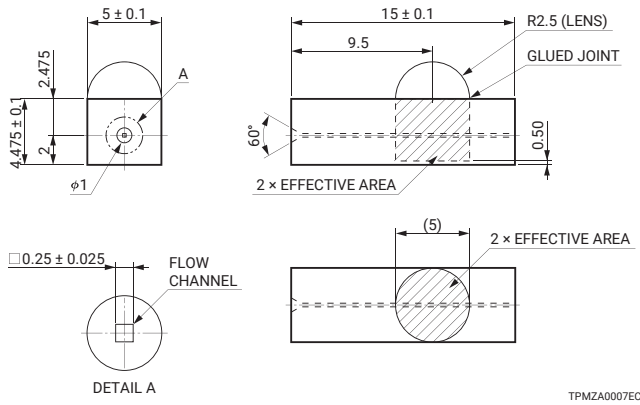
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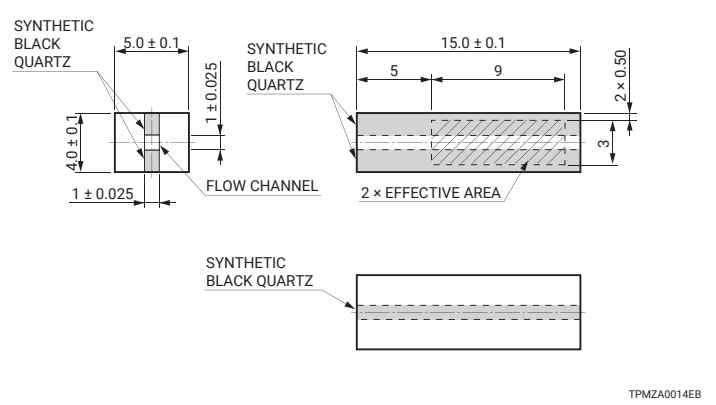
J11020-000-002



J11020-000-003



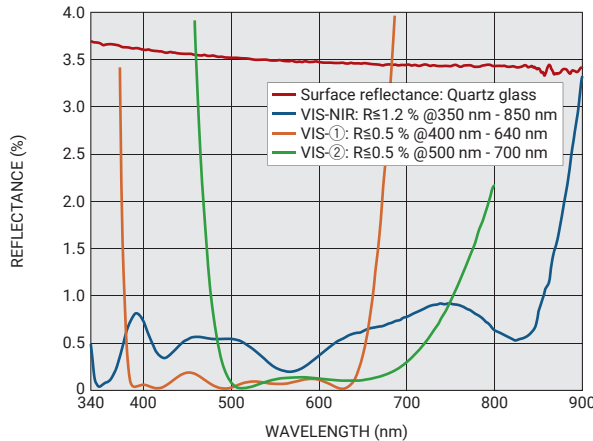
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Other capabilities

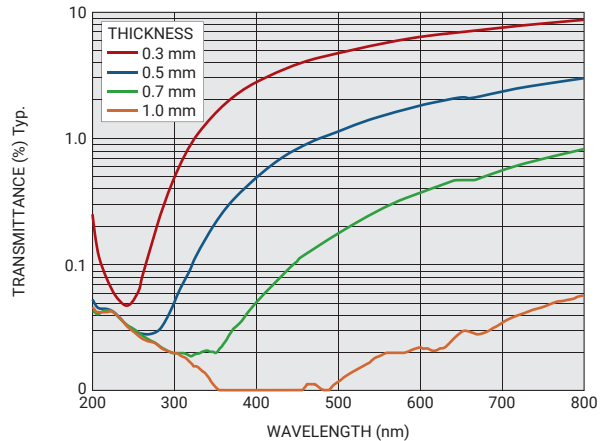
● Optical thin film coating

Ex.: AR (Anti-Reflection) coating: reflectance characteristics



* The values on the above chart are sample values only

● Transmittance of synthetic black quartz



* The values on the above chart are sample values only

● Marking



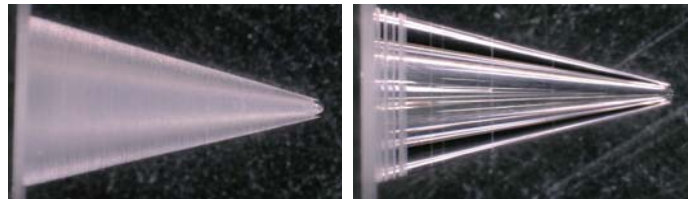
Serial number
Part number
Flow channel size

● Clear polishing for grinded inner surface

Ex.: Conical shape / 30 deg

Before polishing

After polishing



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