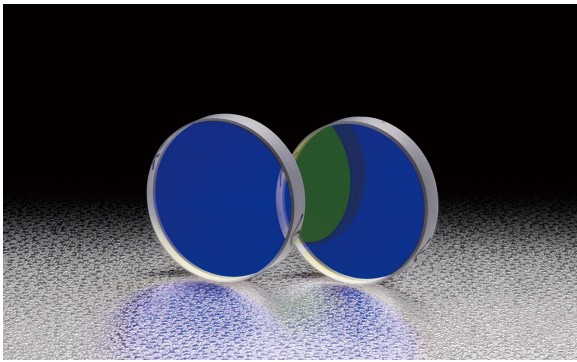


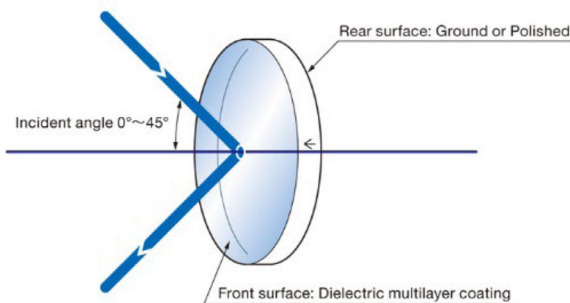
0-45° Wide Incidence Dielectric Mirror TFVMQ-IR RoHS Catalog Code W3234

You can use the 0-45° Wide Angle Dielectric Mirrors for an optical system for reciprocating the light between two mirrors or Michelson interferometer, if you want to use a mirror at an incident angle of 45 ° or less. When used at 45 degree and 0 degree incidence angle, one mirror can be shared to obtain high reflectivity.

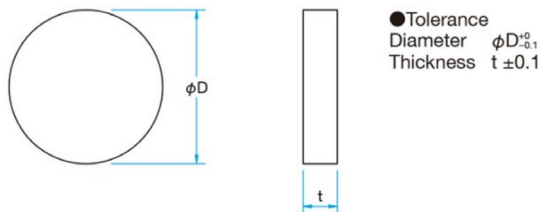
- Very high reflectivity can be obtained between 0 degree to 45 degree angle of incidence.
- If used at a fixed angle of incidence, it can also be used as a broadband mirror.
- Since there is no absorption in the coating there will be very little change in the performance over time and the mirror is durable even with continuous laser irradiation.



Schematic



Outline Drawing



Common Specifications	
Material	Synthetic fused silica
Coating	Dielectric multi-layer coating
Incident Angle	0° - 45°
Surface Flatness	$\lambda/10$
Parallelism	<3'
Surface Quality (Scratch-Dig)	20-10
Clear Aperture	80% of the diameter

Guide

- Please consult our Sales Division for assistance in your selection and for customized products. (customized on outer diameter, wavelength characteristic, etc.) Please use the inquiry sheet.
- This mirror is also available as a "HTFM mirror" which provides guaranteed surface accuracy after coating.

Attention

- Reflectance wavelength characteristics of dielectric multilayer coating vary depending on the polarization state of the incident beam. Reflectance of P-polarized light is lower than that of the S-polarized light, and the reflection range will also be narrower.
- When used not in adaptive wavelength, reflectance may be lower.
- If a mirror is used other than normal incidence, wavelength reflectance characteristics also vary depending on the polarization condition.
- The reflectance characteristics of the 45 degree angle of incidence listed are the average value of the reflectance of P-polarized light and S-polarized light.

Specifications						
Part Number	Diameter ϕD [mm]	Thickness t [mm]	Wavelength Range [nm]	Reflectance [%]	Laser Damage Threshold* [J/cm ²]	Rear Surface
TFVMQ-25.4C05-2100	$\phi 25.4$	5	2100	> 99.8%	8	Polished
TFVMQ-30C05-2100	$\phi 30$	5				
TFVMQ-50C08-2100	$\phi 50$	8				
TFVMQ-25.4C05-3000	$\phi 25.4$	5	3000	> 99.4%	-	Polished
TFVMQ-30C05-3000	$\phi 30$	5				
TFVMQ-50C08-3000	$\phi 50$	8				

*Laser pulse width 4ns, repetition frequency 20Hz

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Typical Reflectance Data

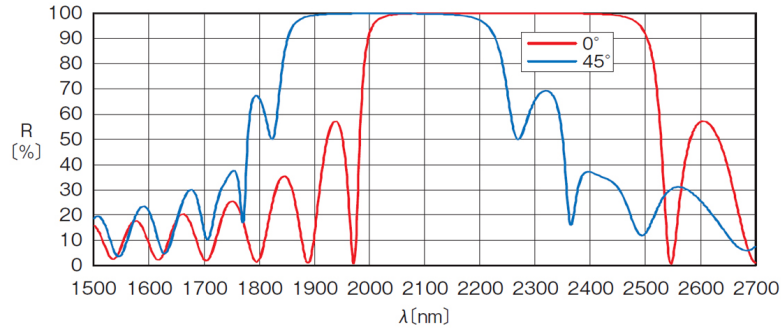
R : Reflectance

45° is average value of P polarization and S polarization

TFVMQ-25.4C05-2100

TFVMQ-30C05-2100

TFVMQ-50C08-2100



TFVMQ-25.4C05-3000

TFVMQ-30C05-3000

TFVMQ-50C08-3000

