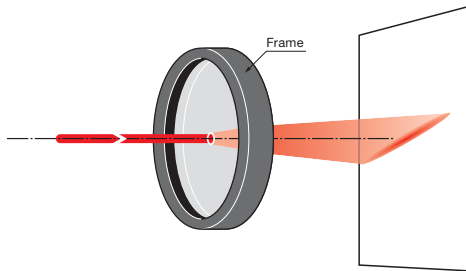


This product is a high transmittance diffuser compared to the other products and we can obtain a wide diffusion light in a single direction. It is fit for fluid observation, used as a light panel and laser marking system.

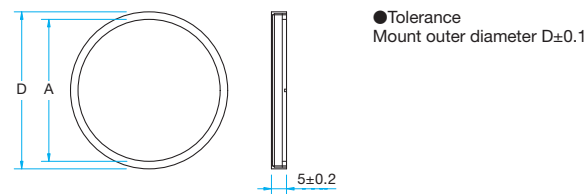
- The beam shaping diffuser is made of with many small lenses in random shape on its surface. The emitted light thru the small lenses form the beam into an ellipse shape. Light cannot cause a big light quantity loss by dispersion or a reflection in the irrelevant direction.
- There is not necessary to adjust the light axis like a lens since the light incident can be projected anywhere on the beam shaping diffuser surface and an ellipse beam shape will be obtained.
- When the optic is rotated, the ellipse shape will rotate too.



Schematic



Outline Drawing (in mm)



Specifications	
Material	Polycarbonate
Optics diameter	About 0.25mm
Wavelength Range	400 – 1100nm
Transmittance	85 – 90% (But it depend on the diffusion angle)
Angle tolerance	±15% (Launch angle >10°) ±1.5° (Launch angle ≤10°)
Refractive index	1.586

Guide

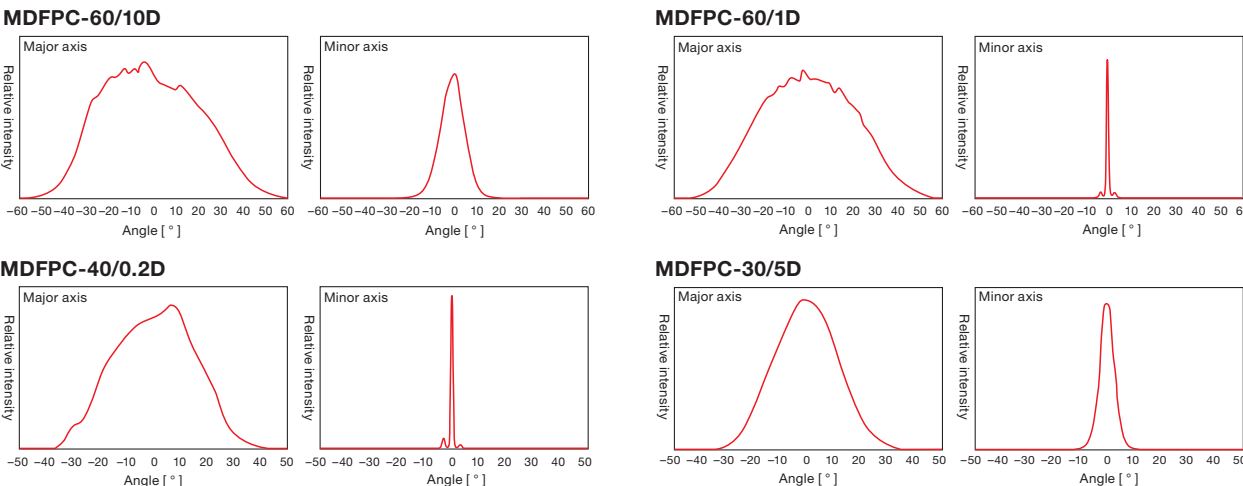
- ▶ We offer this product without mount and in different size, contact our Sales Division with your requests.
- ▶ We can produce the emitted light in circular distribution form.

Attention

- ▶ Can be used for laser light but the diffused light can not be returned to one focused spot.
- ▶ Clean the optics with appropriate lens cleaning alcohol or distilled water only.
- ▶ The surface of the optics is extremely delicate, please avoid any contact with hard material or rub the surface.
- ▶ The optics can be deformed or melt, please avoid using it with high power laser or high energy pulsed laser.

Part Number	Mount outer diameter φD [mm]	Clear aperture φA [mm]	Elliptic diffusion angle (major axis x minor axis) [°]
MDFPC-30-60/10D	φ30	φ22	60×10
MDFPC-30-60/1D	φ30	φ22	60×1
MDFPC-30-40/0.2D	φ30	φ22	40×0.2
MDFPC-30-30/5D	φ30	φ22	30×5
MDFPC-52-60/10D	φ52	φ47	60×10
MDFPC-52-60/1D	φ52	φ47	60×1
MDFPC-52-40/0.2D	φ52	φ47	40×0.2
MDFPC-52-30/5D	φ52	φ47	30×5

Diffusion Angle Characteristics (Reference data)



Compatible Optic Mounts

FH-50 / LHF-30 / LHA-60

Application Systems

Optics & Optical Coatings

Opto-Mechanics

Bases

Manual Stages

Actuators & Adjusters

Motoeized Stages

Light Sources & Laser Safety

Index

Guide

Mirrors

Beamsplitters

Polarizers

Lenses

Multi-Element Optics

Filters

Prisms

Substrates/Windows

Optical Data

Maintenance

Selection Guide

ND Filters

Diffusers

Colored Glass Filters

Dielectric Filters

Etolon