

PRODUCT FEATURES

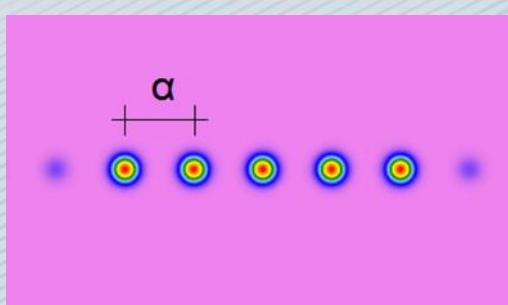
- ▲ Separation of the input beam into five beams
- ▲ Thin single optical element

APPLICATIONS

- ▲ Parallel laser material processing
- ▲ Parallel laser scanning
- ▲ Laser perforation
- ▲ Optical measurement

RELATED PRODUCT

- ▲ Rotation mount HSF03 for rotation /alignment of the spot array



DBS-1x5

1x5 Diffractive Beam Splitter

1x5 beam splitters diffract the input beam into 5 beams. Each beam has > 14 % of total input power. The uniformity error $(I_{max} - I_{min})/(I_{max} + I_{min})$ is < 5 %. Besides, the power in the highest unwanted diffraction order is < 2 % (of input power).

SPECIFICATIONS

Efficiency	> 71 %
Uniformity error	< 5 %
Strongest unwanted beam	< 2 %
Dimensions ¹⁾	dia. 25.4 mm / thickness 3 mm
Active area ¹⁾	dia. 23 mm
Material ¹⁾	fused silica
Damage threshold @ 10 ns	10 J/cm ² @ 1064 nm; 5 J/cm ² @ 532 nm; 3 J/cm ² @ 355 nm
Incl. AR/AR coating	

¹⁾ Others on request

AVAILABLE SEPARATION ANGLE α

1064 nm	1030 nm	532 nm	515 nm	355 nm	343 nm
0.301 °	0.291 °	0.151 °	0.146 °	0.101 °	0.097 °
0.296 °	0.287 °	0.148 °	0.143 °	0.099 °	0.095 °
0.065 °	0.062 °	0.032 °	0.031 °	0.022 °	0.021 °

Model No.: DBS-1x5-wavelength-separation angle

Other angles or wavelengths on request.