

DBS-1x6 1x6 Diffractive Beam Splitter

PRODUCT FEATURES

- ▲ Separation of the input beam into six 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



1x6 beam splitters diffract the input beam into 6 beams. Each beam has > 13 % of total input power. The uniformity error $(I_{max} - I_{min}) / (I_{max} + I_{min})$ is < 2 %. Besides, the power in the highest unwanted diffraction order is < 2 % (of input power).

SPECIFICATIONS

Efficiency	> 80 %
Uniformity error	< 2 %
Light in 0th order beam	< 1 %
Strongest unwanted beam	< 1 %
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
1.008 °	0.975 °	0.504 °	0.488 °	0.336 °	0.325 °
0.504 °	0.488 °	0.252 °	0.244 °	0.168 °	0.162 °
0.252 °	0.244 °	0.126 °	0.122 °	0.084 °	0.081 °
0.101 °	0.098 °	0.050 °	0.049 °	0.034 °	0.032 °

Model No.: DBS-1x6-wavelength-separation angle

Other angles or wavelengths on request.

