

DBS-1x2

1x2 Diffractive Beam Splitter

PRODUCT FEATURES

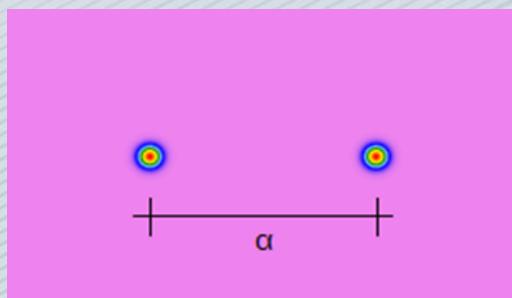
- ▲ Separation of the input beam into two beams
- ▲ Thin single optical element

APPLICATIONS

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

RELATED PRODUCT

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



1x2 beam splitters diffract the input beam into 2 beams. Each beam has > 40 % 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 < 5 % (of input power).

SPECIFICATIONS

Efficiency	> 80 %
Uniformity error	< 2 %
Light in 0th order beam	< 1 %
Strongest unwanted beam	< 5 %
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
4.585 °	4.438 °	2.292 °	2.219 °	1.529 °	1.478 °
1.999 °	1.935 °	0.999 °	0.968 °	0.667 °	0.644 °
0.999 °	0.968 °	0.500 °	0.484 °	0.333 °	0.322 °
0.458 °	0.444 °	0.229 °	0.222 °	0.153 °	0.148 °
0.229 °	0.222 °	0.115 °	0.111 °	0.077 °	0.074 °
0.183 °	0.178 °	0.092 °	0.089 °	0.061 °	0.059 °
0.115 °	0.111 °	0.057 °	0.056 °	0.038 °	0.037 °
0.046 °	0.044 °	0.023 °	0.022 °	0.015 °	0.015 °
0.040 °	0.039 °	0.020 °	0.019 °	0.013 °	0.013 °

Model No.: DBS-1x2-wavelength-separation angle

Other angles or wavelengths on request.