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DBS-7/6 7/6 Diffractive Beam Splitter

PRODUCT FEATURES

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

APPLICATIONS

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

7/6 beam splitter diffracts the input beam into 7 beams. Positions of 6 beams are in the edges of a hexagon. The 7th beam is centered to the 6 other beams. The power in each beam in ratio to the input power is > 10.5% and the uniformity error $(I_{max} - I_{min})/(I_{max} + I_{min})$ is < 5%. The power in the highest unwanted diffraction order is < 1% (of input power).

SPECIFICATIONS

Efficiency	> 75%		
Uniformity error	< 5%		
Strongest unwanted beam	< 1%		
Dimensions	dia. 25.4mm/thickn. 3mm		
Active area	dia. 23mm		
Damage threshold	5J/cm ² @ 10ns, 1064nm		
	4J/cm ² @ 10ns, 532nm		
	2J/cm ² @ 10ns, 355nm		

Incl. AR/AR coating

SEPARATION ANGLE

1064nm	1030nm	532nm	515nm	355nm	343nm
0.573°	0.555°	0.286°	0.277°	0.191°	0.185°
0.229°	0.222°	0.115°	0.111°	0.077°	0.074°
0.115°	0.111°	0.057°	0.056°	0.038°	0.037°
0.057°	0.056°	0.029°	0.028°	0.0191°	0.0185°
0.029°	0.028°	0.014°	0.014°	0.0096°	0.0092°
	0.573° 0.229° 0.115° 0.057°	0.573°0.555°0.229°0.222°0.115°0.111°0.057°0.056°	0.573°0.555°0.286°0.229°0.222°0.115°0.115°0.111°0.057°0.057°0.056°0.029°	0.573°0.555°0.286°0.277°0.229°0.222°0.115°0.111°0.115°0.111°0.057°0.056°0.057°0.056°0.029°0.028°	0.573° 0.555° 0.286° 0.277° 0.191° 0.229° 0.222° 0.115° 0.111° 0.077° 0.115° 0.111° 0.057° 0.056° 0.038° 0.057° 0.056° 0.029° 0.028° 0.0191°

Model No.: DBS-7/6-Wavelength-Separation angle

Other angles or wavelength on request

