

LASER HARMONIC SEPARATORS

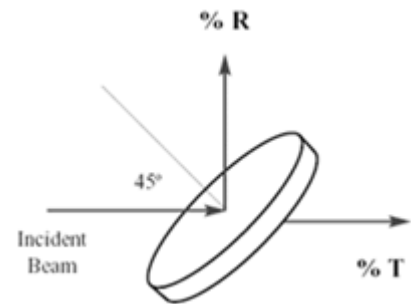
Harmonic separators are dichroic beamsplitters used to reflect one wavelength and to transmit the others. Reflectance is better than 99.5% for the wavelength of interest and transmittance is at least 90% for the rejected wavelengths. The rear surface of harmonic separators is antireflection coated.

Standard Specifications:

Optical Material:	BK7 A grade glass
Dimension Tolerance:	+0.0,-0.15mm
Clear Aperture:	>90%
Angular Tolerance:	±30 arc minutes
Surface Quality:	20-10 scratch and dig
Wavefront Distortion:	$\lambda/10$ at 632.8nm
Bevel:	<0.25mm X 45

Coating Specifications:

Technology:	Thermal Evaporation
Adhesion & Durability:	Per MIL-C-675A, Insoluble in lab solvent
Clear Aperture:	> 85% of diameter central
Damage Threshold:	> 2 J/cm ² , 8 ns pulse, 1064 nm
Reflectance (R _{avg}):	>99.5% @45 degrees AOI
Rear side AR coat	R<15%
Angle of Incidence:	45 or 0 Degrees



Standard For Laser Harmonic separators:

Reflected Wavelength(nm)	Transmitted Wavelength(nm)	AOI (°)	Product Number		
			D25.4x5mm	D30.0x6mm	D50.8x8mm
1064	532	0°	UQT-LHSB0101	UQT-LHSB0201	UQT-LHSB0301
1064	532	45°	UQT-LHSB0102	UQT-LHSB0202	UQT-LHSB0302
355	1064	0°	UQT-LHSB0103	UQT-LHSB0203	UQT-LHSB0303
355	1064	45°	UQT-LHSB0104	UQT-LHSB0204	UQT-LHSB0304

Please Contact [ultiQuest](#) for other dimensions in prototype and production quantities.

NOTES!

- The reflectance curves are based on actual measurements and may be different with production lots.
- The surface flatness is the reflected wavefront distortion of the surface before coating.
- Be sure to wear laser safety goggles when checking optical path and adjusting optical axis.