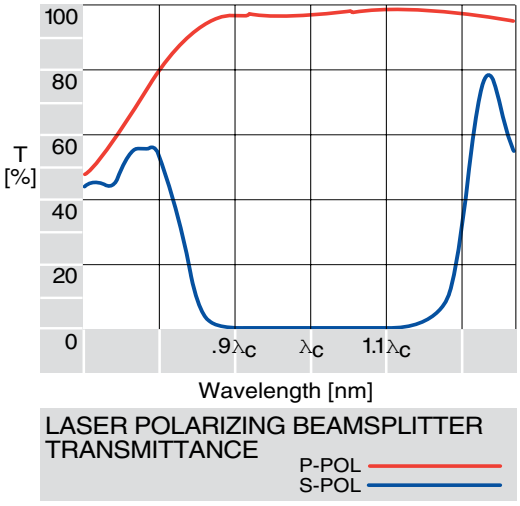
High Power Laser Polarizing Cube Beamsplitters

- Thin film polarizers optimized for use at popular laser wavelengths
- Transmitted extinction ratio of better than $2.5x10^{-3}$
- Reflected extinction ratio of better than $2x10^{-2}$
- Polarizing film mounted on the internal face of a cube beamsplitter
- Multilayer high efficiency narrowband Anti-Reflection coatings on all faces

These are thin film polarizers constructed as a cube. Thin film polarizers utilize the polarization which occurs on reflection from a plane surface. By combining a large number of such surfaces in a stack it is possible to obtain useful extinction ratios. The s-polarization is more than 99% reflected while the p-polarization can be suppressed in the reflected beam and become 95% transmitted. Thin film polarizers can be optimized for a particular wavelength to give superior performance for laser applications.

Specifications & Tolerances

Dimensions: ±0.2mm
Surface flatness: λ/4
Beam deviation: ≤10arcmin
Asymmetry: 1°
Surface quality: 40-20
Material: BK7
Coating: Narrowband multilayer
Anti-Reflection on faces
Extinction ratio: T_s<$2.5x10^{-3}$,<$5x10^{-3}$
@1064 nm R_p<$2x10^{-2}$
Damage threshold: <7J/cm2 in 10ns
@1064nm



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Wavelength Range (nm)	Cube Side, a (mm)	Material	Surface Flatness	Price	PART NUMBER
355	10.0	SFS	λ/4		**067-3100**
355	15.0	SFS	λ/4		**067-3110**
355	20.0	SFS	λ/4		**067-3120**
532	10.0	BK7	λ/4		**067-3130**
532	15.0	BK7	λ/4		**067-3140**
532	20.0	BK7	λ/4		**067-3150**
1064	10.0	BK7	λ/4		**067-3160**
1064	15.0	BK7	λ/4		**067-3170**
1064	20.0	BK7	λ/4		**067-3180**

ORDERING
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