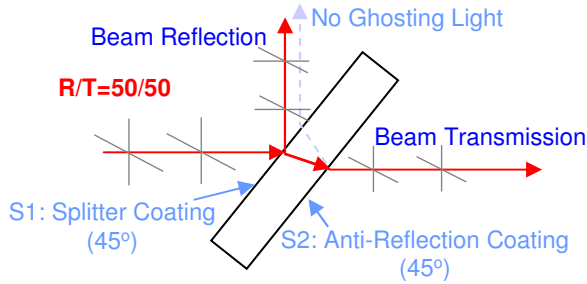
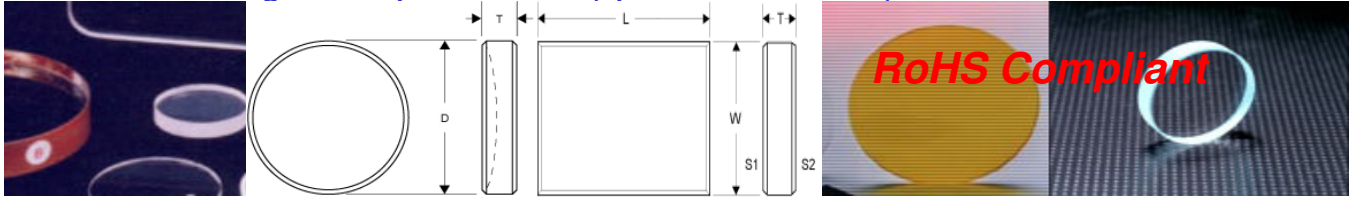


# 45° BEAM SPLITTER PLATE – Non-Pol Series



- Plate Design;
- Full Dielectric, Broadband Coating
- 50: 50 UNP Laser Splitting
- BBAR Coating on Back Surface
- CW or Low Power Pulsed Laser Applications
- Circular or Rectangular or Square Available (up to 200mm x 200mm)



**Beamsplitter plates** can be used to either split or combine a laser beam with broad bandwidth or multiple beams in the same optical path within a specified wavelength range. A durable all-dielectric multilayer coating design is used for neutral splitting of unpolarized UV, visible or near-infrared light at a 90° angle.

The back surface is antireflection coated to reduce secondary reflections and ghost images.

## GENERAL SPECIFICATIONS:

**Substrate Material** (shown as "M" in P/N):  
**Surface Quality:**  
**Wedge:**  
**Clear Aperture:**  
**Transmitted Wavefront**  
**Dimension (mm)** (shown as "D" in P/N):

**M0:** BK7 optical glass; **M1:** UV fused silica  
 20 – 10 scratch and dig laser quality  
 < 30 arc seconds typ (or per special request)  
 Central diameter, >90% of dimension  
 $\leq \lambda/10$  P-V at 632.8nm over the clear aperture

<b>D10:</b>	10.0 x 10.0;	<b>D10C:</b>	Ø10.0;
<b>D12.7:</b>	12.7 x 12.7;	<b>D12.7C:</b>	Ø12.7;
<b>D15:</b>	15.0 x 15.0;	<b>D15C:</b>	Ø15.0;
<b>D20:</b>	20.0 x 20.0;	<b>D20C:</b>	Ø20.0;
<b>D25.4:</b>	25.4 x 25.4;	<b>D25.4C:</b>	Ø25.4;
<b>D30:</b>	30.0 x 30.0;	<b>D30C:</b>	Ø30.0;
<b>D38.1:</b>	38.1 x 38.1;	<b>D38.1C:</b>	Ø38.1;
<b>D50.8:</b>	50.8 x 50.8;	<b>D50.8C:</b>	Ø50.8;

**Thickness (mm)** (shown as "T" in P/N):  
**Dimension Tolerance (mm):**  
**Chamfer:**  
**Input Surface(S1):**  
**Output Surface(S2):**

or other sizes upon request  
**T1:** 1.0; **T2:** 2.0; **T3:** 3.0; **T4:** 4.0; **T5:** 5.0; **T6:** 6.0; **T8:** 8.0  
 Outer dimension: -0.25/+0.00 typ. Thickness: - 0.05/+0.05 typ.  
 0.20mm at 45° typ.  
 Beamsplitter NPBS coating, 45° AOI  
 Broadband AR Coating R<0.5%(45° AOI) in specified band

**Operation Band Selections** (shown as "W" in P/N):

<b>W1:</b> 300~500nm;	R & T tolerance: ±5% (over entire band);  Ts-Tp <15% and  Rs-Rp <15%
<b>W2:</b> 400~700nm;	R & T tolerance: ±5% (over entire band);  Ts-Tp <10% and  Rs-Rp <10%
<b>W3:</b> 700~1100nm;	R & T tolerance: ±5% (over entire band);  Ts-Tp <10% and  Rs-Rp <10%
<b>W4:</b> 1200~1600nm;	R & T tolerance: ±5% (over entire band);  Ts-Tp <15% and  Rs-Rp <15%

**Coating Damage Threshold:**

2 kW/cm<sup>2</sup> CW, 100mJ/cm<sup>2</sup> with 10 nsec pulses at 10 Hz

**Adhesion and Durability:**

MIL-M-13508C, MIL-C-675C, MIL-C-14806

**Housing/Package** (shown as "H" in P/N):

**NH:** Un-mounted, typ.

**M:** Mounted: per request (F/M adapting ring, or SM1 series tube)

## Ordering Information:

**NPBS – P – <M> – <D> – <T> – <W> – <H>**

Accessories:  
more available



**OPTIONS:** mirror mounts, holders, posts, bases, clamps, XYZ translation stages... available upon request;

Call us for immediately delivery or demonstration/testing. 24-hour delivery for most of standard optics and opto-mechanical parts.

Photonik reserves the rights to change product designs with upgraded specifications for better performance without prior notice.