

PELHAM RESEARCH OPTICAL L.L.C.

Specializing in Precision VUV/UV Optical Coating and Service

UV Beamsplitters

Pelham Research Optical (PRO) manufactures a Broadband UV Metallic Beamsplitter (UVBS) from 170nm to 300nm @ 45 degrees AOI with 40% to 50% average reflectance and transmission. These UVBS filters cannot be covered and edge sealed and are supplied as open-faced filters only. PRO UVBS coatings can be applied to different sized substrates to meet your instrument requirements, please see page 10 for filter substrate specifications, image quality filters available by request. The light beam must enter the coated surface (reflective side) first. Metallic beamsplitters are very broad so they can cover a larger wavelength than dielectric beamsplitters. Due to their metallic coating UVBS are designed for low power applications.

%R and %T	1.0" Dia.	2.0" Dia.	
Average	Part Number	Part Number	
40-50%	UVBS45-1D	UVBS45-2D	



UV Neutral Density Filters

Typical Transmission Curve

Metallic neutral density (ND) filters work on the principle of the combination of reflectance, transmission and absorption to achieve the desired optical density. Neutral density (ND) filters are used in a variety of applications where the intensity of light needs to be evenly reduced. These filters are used in applications such as microscopy and optical calibration. PRO manufactures a standard line of UV metallic neutral density (UVND) optical filters ranging from 0.3 to 4.0 optical densities. PRO UV neutral density (UVND) filters uniformly attenuates the intensity of transmitted light from 200m to 320nm. Please see page 10 for filter substrate specifications, image quality filters available by request. All of PRO neutral densities are covered and edge sealed.

Optical	Nominal	Transmission	0.5" Dia.	1.0" Dia.	2.0" Dia.
Density (O.D.)	Transmittance	Tolerance ±%T	Part Number	Part Number	Part Number
0.3	50%	± 8% T	0.3UVND5D	0.3UVND-1D	0.3UVND-2D
0.5	30%	± 5% T	0.5UVND5D	0.5UVND-1D	0.5UVND-2D
1	10%	± 2.5% T	1UVND5D	1UVND-1D	1UVND-2D
1.5	3%	± 0.7% T	1.5UVND5D	1.5UVND-1D	1.5UVND-2D
2	1%	± 0.4% T	2UVND5D	2UVND-1D	2UVND-2D
3	0.10%	± 0.06% T	3UVND5D	3UVND-1D	3UVND-2D
4	0.01%	± 0.008% T	4UVND5D	4UVND-1D	4UVND-2D

Phone: +1 603-635-3278 www.pelhamresearchoptical.com Fax: +1 603-635-3278 email:sales@pelhamresearchoptical.com