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Filters

II-VI Aerospace & Defense provides filters that are used to transmit over a specified range of wavelengths while blocking undesired wavelengths. The blocking is accomplished by the absorption of these wavelengths by the substrate material or by reflection of specifically designed thin film coatings or by combination of the two. Shortpass, longpass and bandpass filters can be manufactured in a variety of configurations and designed to reshape the spectral content of existing light sources.

Property	Typical Specifications
Product Category	Filters
Material	Fused silica, optical glass, various crystal and CVD materials
Wavelength Range [nm]	266 – 12,000
Parallelism (Wedge) [second]	≤ 5
TWF Distortion at 632.8nm [wave]	0.100
Clear Aperture [Central %]	90%
Surface Quality	10-5
Surface Flatness at 632.8nm [wave]	0.100
Dimensions [mm]	1 to 300
Dimensional Tolerance +/- [mm]	+0/-0.1
Anti-Reflective Coatings	As Requested
Laser Damage Threshold @ 1064nm [J/cm² at 20Hz with a 20ns pulse-width]	15
1 - The above specifications are typical and provided for reference. The customer's specific product requirements will be reviewed and guaranteed specifications stated on our quotation.	
2 - The applicable wavelength range depends on optical properties of the substrate material and thin films/coatings.	
3 - Dimensions and tolerances are provided for reference only - capability for larger/smaller optical components and more demanding tolerances exist.	
4 - Durability of optics and thin films depends on several factors, some of which are the probing wavelength, the operating regime (CW or pulsed), and in case of the pulsed regime on the pulse width and the laser repetition rate. The data shown in the table are presented for reference only - scaled to 20ns-wide pulses at 1064nm at the rate of 20Hz.	

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