



# Electro Optical Components, Inc.

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TERMINOLOGY	SYMBOL	DEFINITION
Wavelength	$\lambda$	Stated in microns (micrometers, $10^{-6}$ metre)
Wavenumber	$\sigma$	Inverse of wavelength, usually specified in $\text{cm}^{-1}$
Centre Wavelength	CWL	Wavelength at centre of passband measured at 50% of peak transmittance
Cut on / Cut off wavelength	$\lambda_c$	Wavelength at which filter begins/ceases to transmit. Usually specified at 5% or 50% absolute transmittance points
Transmittance	T	Ratio of transmitted energy to incident energy expressed in percent
Peak Transmittance	$T_{pk}$	Highest transmittance (occurs at peak wavelength)
Bandwidth	FWHM, BW, HBW, HW	Width of the passband measured at half the peak transmittance. Expressed in microns or percentage of centre wavelength.
Cut on/off slope	-	<p>A measure of the steepness of the transmittance curve</p> $\frac{\lambda_{80} - \lambda_5}{\lambda_5} \times 100\%$ <p>Where <math>\lambda_{80\%}</math> and <math>\lambda_{5\%}</math> correspond to 80% and 5% to absolute transmittance points.</p>
Blocking or attenuation	-	Ability to prevent energy at wavelengths outside the passband being transmitted. Expressed as a percentage of incident energy. Typically less than 0.1% (optical density 3.0).
Reflection	R	Ratio of reflected energy to incident energy expressed as a percentage
Absorptance	A	Ratio of absorbed energy to incident energy expressed as a percentage
Effective index	$n_*$	The apparent index of refraction of a substrate plus coating stack