



## Grating TBG-1085-99.9

Parameter	Value	Tolerance on parameters	Notes
<b>Main grating parameters</b>			
Type of a grating	TBG		
Resonant wavelength <b>WL</b> (nm)	1085	$\pm 0.5$	Peak (central) wavelength
Diffraction efficiency <b>DE</b> (%)	99.9	$\pm 0.1$	Relative DE defined for plane monochromatic wave
<b>Additional grating parameters</b>			
Incident angle <b>IA</b> (deg)	32.9	$\pm 1.5$	In air
Exit angle <b>EA</b> (deg)	-32.9	$\pm 1.5$	In air
Thickness <b>T</b> (mm)	2.0	$\pm 0.1$	
Width <b>W</b> (mm)	25	$\pm 0.5$	
Height <b>H</b> (mm)	25	$\pm 0.5$	
Clear aperture <b>X×Y</b> (mm <sup>2</sup> )	22.5 × 22.5	$\pm 0.5$	90% of grating dimensions
Antireflection coating <b>AR</b> (if specified)	U		Uncoated
<b>Reference Parameters</b>			
Grating losses <b>GL</b> (%)	9.0	$\pm 0.5$	For uncoated grating at resonant wavelength
Angular selectivity <b>AS</b> (mrad)	0.65	$\pm 0.05$	FWHM
Spectral selectivity <b>WS</b> (nm)	1.2	$\pm 0.1$	FWHM
Grating period <b>d</b> (μm)	1.0	$\pm 0.0003$	
Refractive index	1.486651		At 1085 nm
Refractive index modulation <b>RIM</b> (ppm)	250	$\pm 10$	Amplitude of sinusoidal modulation
Grating slant angle in a glass wafer <b>SL</b> (deg)	90	$> 89$	Inside the grating medium