OptiGRATE
HIGH EFFICIENCY FOR HIGH POWER

Transmitting Bragg Gratings (TBG)

Parameter	Range of parameter change	Notes
Main grating parameters		
Type of a grating	**TBG**	
Resonant wavelength **WL** (nm)	400 ÷ 2700	Peak (central) wavelength
Diffraction efficiency **DE** $=I_d/(I_d+I_t)$ (%)	0 ÷ 99.9	Relative DE defined for plane monochromatic wave
Additional grating parameters		
Incident angle **IA** (θ_i, deg)	−90 ÷ +90	In air
Exit angle **EA** (θ_d, deg)	+90 ÷ −90	In air
Thickness **T** (mm)	0.5 ÷ 20	
Width **W** (mm)	1 ÷ 35	
Height **H** (mm)	1 ÷ 35	
Antireflection coating **AR** (if not specified – uncoated **U**)	**R**<0.25% per surface for **BB** **R**<0.1% per surface for **NB**	Either broadband (**BB**) or narrowband (**NB**)
Reference Parameters		
Grating losses **GL**=$(I_i-I_d-I_t)/I_i$ (%)	0.1 ÷ 10	< 10% for uncoated **(U)** gratings; < 2.5% for gratings with **AR** coating
Angular selectivity **AS** ($\delta\theta$, mrad)	0.1 ÷ 10	Full Width at Half Maximum (FWHM)
Spectral selectivity **WS** ($\delta\lambda$, nm)	0.2 ÷ 20	Full Width at Half Maximum (FWHM)
Grating period **d** (Λ, μm)	0.2 ÷ 20	
Refractive index modulation **RIM** (δn, ppm)	50 ÷ 1200	Amplitude of sinusoidal modulation
Grating slant angle in a glass wafer **SL** (ϕ, deg)	−42 ÷ −90 +42 ÷ +90	Inside the grating medium