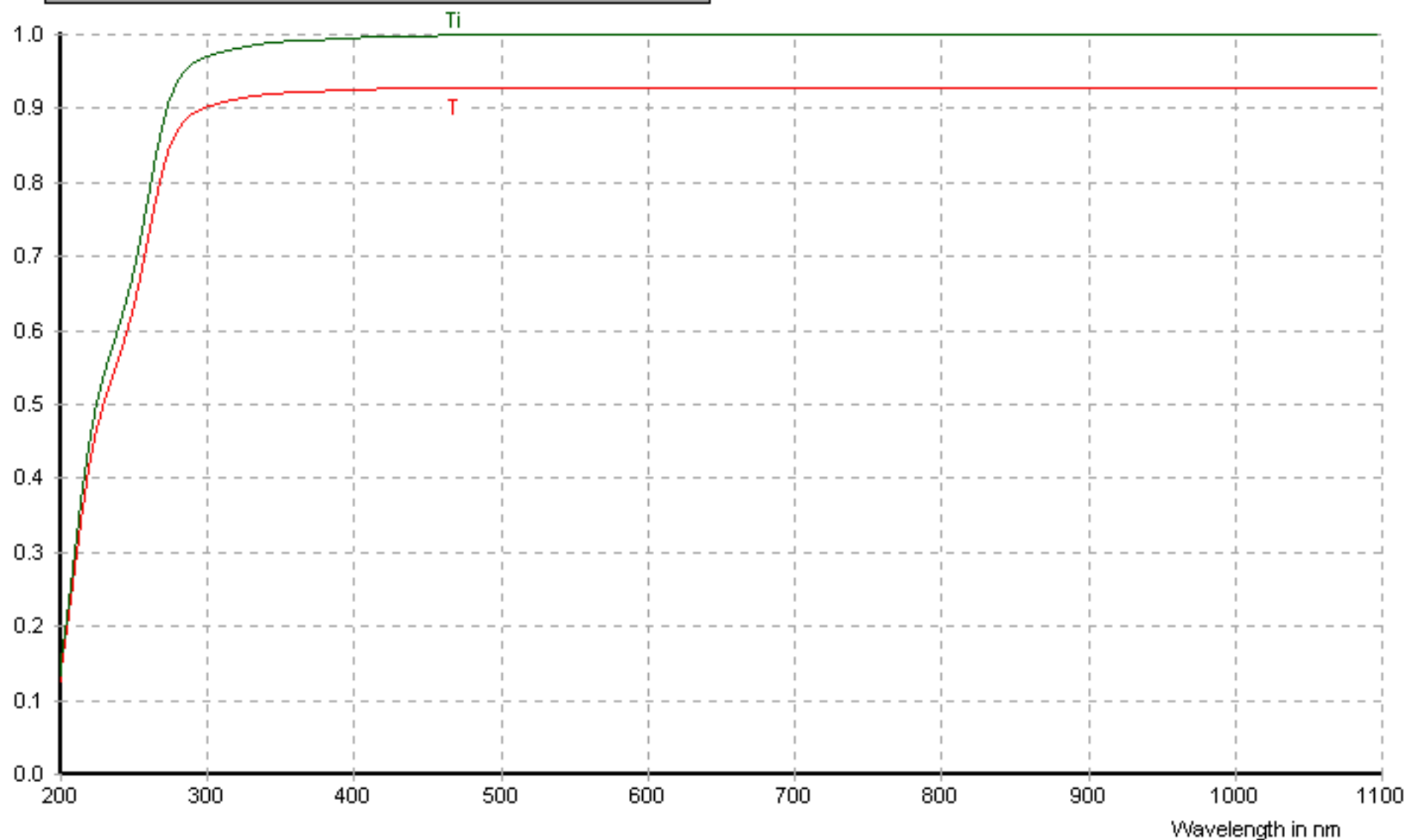


Thickness in mm : 2.0  
Wavelength in nm :  
Transmittance :  
Internal Transmittance :

# WG 225

**SCHOTT**  
TOTAL CUSTOMER CARE



<b>Reflection factor</b>	
$P_d$	0.93
<b>Bubble content</b>	
Bubble class	1
<b>Chemical resistance</b>	
FR class	3
SR class	51.3
AR class	3.3

<b>Density</b>	
$\rho$ [g/cm <sup>3</sup> ]	2.17
<b>Transformation temperature</b>	
$T_g$ [°C]	437
<b>Thermal expansion</b>	
$\alpha_{-30/+70^\circ\text{C}}$ [10 <sup>-6</sup> /K]	3.8
$\alpha_{20/300^\circ\text{C}}$ [10 <sup>-6</sup> /K]	4.1
<b>Temperature coefficient</b>	
$T_k$ [nm/°C]	0.02

Per DIN 58191  
Per DIN 58191

LP 225

Base glass

### Tolerances for long pass filters for thickness $d = 2$ mm

$\lambda_C$ ( $\tau_i = 0,5$ mm) [nm]	225+5/-15
$\lambda_S$ ( $\tau_{iS} = 1 \cdot 10^{-5}$ ) [nm]	280

### Refractive index n

$\lambda$ [nm]	Element	n
253.7	Hg	1.52
365	Hg	1.49
587.6	He	1.47
1014	Hg	1.46

### Tristimulus values

	d [mm]	x	y	Y	$\lambda_d$ [nm]	$P_e$
A	1					
2856	2					
K	3					
	5					
	1					
3200	2					
K	3					
	5					
	1					
$D_{65}$	2					
	3					
	5					

### Application notes

Long pass filter  
- see section 6.7.1

[ ! ]

Long-term changes in the polished surface are possible under some circumstances  
- see section 5.5

∇

Transmission changes are possible under the action of intense ultraviolet radiation  
- see section 8.3

Status June 1997

### Transmittance $\tau$ and internal transmittance $\tau_i$ at $d = 2$ mm

$\lambda$ [nm]	$\tau$	$\tau_i$	$\lambda$ [nm]	$\tau$	$\tau_i$
200	0.13	0.14	700	0.93	1.00
210	0.27	0.29	710	0.93	1.00
220	0.41	0.44	720	0.93	1.00
230	0.50	0.54	730	0.93	1.00
240	0.56	0.60	740	0.93	1.00
250	0.63	0.67	750	0.93	1.00
260	0.72	0.77	760	0.93	1.00
270	0.81	0.87	770	0.93	1.00
280	0.87	0.94	780	0.93	1.00
290	0.89	0.96	790	0.93	1.00
300	0.90	0.97	800	0.93	1.00
310	0.91	0.98	850	0.93	1.00
320	0.91	0.98	900	0.93	1.00
330	0.92	0.99	950	0.93	1.00
340	0.92	0.99	1000	0.93	1.00
350	0.92	0.99	1060	0.93	1.00
360	0.92	0.99	1100	0.93	1.00
370	0.92	0.99	1200	0.93	1.00
380	0.92	0.99	1300	0.93	1.00
390	0.92	0.99	1400	0.93	1.00
400	0.93	1.00	1500	0.93	1.00
410	0.93	1.00	1600	0.93	1.00
420	0.93	1.00	1700	0.93	1.00
430	0.93	1.00	1800	0.93	1.00
440	0.93	1.00	1900	0.93	1.00
450	0.93	1.00	2000	0.92	0.99
460	0.93	1.00	2100	0.92	0.99
470	0.93	1.00	2200	0.92	0.99
480	0.93	1.00	2300	0.91	0.98
490	0.93	1.00	2400	0.85	0.91
500	0.93	1.00	2500	0.84	0.90
510	0.93	1.00	2600	0.80	0.86
520	0.93	1.00	2700	0.57	0.61
530	0.93	1.00	2800	0.03	0.03
540	0.93	1.00	2900	0.07	0.07
550	0.93	1.00	3000	0.13	0.14
560	0.93	1.00	3200	0.24	0.26
570	0.93	1.00	3400	0.04	0.04
580	0.93	1.00	3600	$9 \cdot 10^{-5}$	$1 \cdot 10^{-4}$
590	0.93	1.00	3800	0.002	0.002
600	0.93	1.00	4000	$5 \cdot 10^{-4}$	$5 \cdot 10^{-4}$
610	0.93	1.00	4200	$9 \cdot 10^{-4}$	0.001
620	0.93	1.00	4400	$9 \cdot 10^{-5}$	$1 \cdot 10^{-4}$
630	0.93	1.00	4600	$< 1 \cdot 10^{-5}$	$< 1 \cdot 10^{-5}$
640	0.93	1.00	4800	$< 1 \cdot 10^{-5}$	$< 1 \cdot 10^{-5}$
650	0.93	1.00	5000	$< 1 \cdot 10^{-5}$	$< 1 \cdot 10^{-5}$
660	0.93	1.00	5200	$< 1 \cdot 10^{-5}$	$< 1 \cdot 10^{-5}$
670	0.93	1.00			
680	0.93	1.00			
690	0.93	1.00			