Data Sheet

RG905

Optical properties			
Reflection factor			
	P_d	=	0,921
Spectral values guaranteed			
τ_i (405 nm)		≤	0,002
τ_i (490 nm)		≤	0,08
τ_i (645 nm)		≤	0,002
τ_i (905 nm)		≥	0,97
Refractive indices			
n_F (486 nm)		=	1,516
n_e (546 nm)		=	1,512
n_d (587,6 nm)		=	1,51
Sellmeier coefficients			
valid from 440 nm to 1550 nm			
B_1	0,6150		
B_2	0,6285		
B_3	13,7990		
C_1	1,035E-02 µm²		
C_2	1,0302E-02 µm²		
C_3	1939,581 µm²		
Internal quality			
Bubble class	-		

Mechanical properties			
Reference thickness			
	d	=	4,00 mm
Density			
	ρ	=	2,54 g/cm³
Knoop hardness			
	HK[0.1/20]	=	438

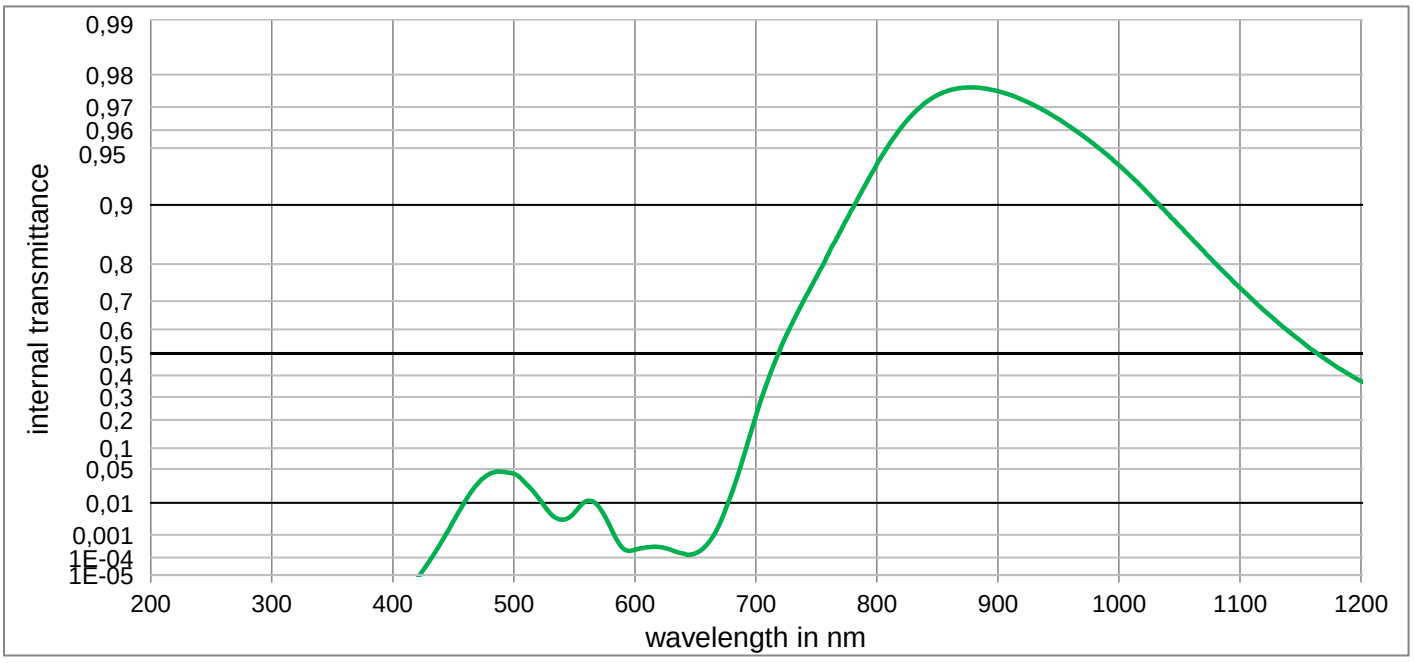
Thermal properties			
Transformation temperature			
	Tg	=	481 °C
Thermal expansion in			10^{-6}/K
	$\alpha_{(-30°C/+70°C)}$	=	8,7
	$\alpha_{(20°C/300°C)}$	=	10,0

Chemical properties			
Chemical resistance			
	FR class	=	0
	SR class	=	1.0
	AR class	=	1.0
Resistance against humidity			

Colormetric properties		1 mm	2 mm	3 mm
Illuminant D65	x			
	y			
	Y			
	λ_d			
	P_e			
Illuminant A	x			
	y			
	Y			
	λ_d			
	P_e			

Notes
Bandpass filter / Longpass filter
ISO 23364:2021

Disclaimer
All data without tolerances are to be understood to be reference values.



Status 25.04.2023

Data Sheet

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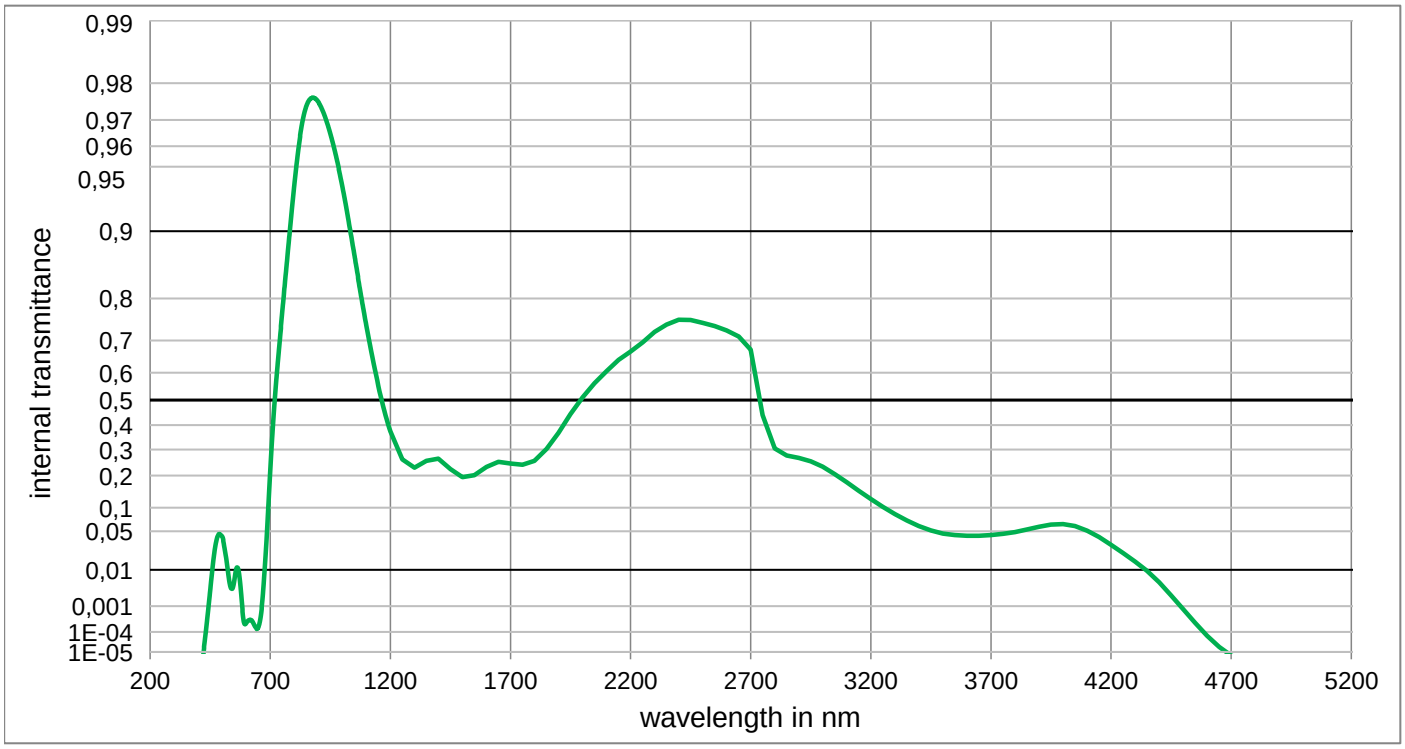

Internal transmittance ti at reference thickness
The internal transmittance values, tabulated and graphically represented, are reference values only

λ /nm	τ_i	λ /nm	τ_i	λ /nm	τ_i	λ /nm	τ_i	λ /nm	τ_i	λ /nm	τ_i
200	< 1,000E-05	500	4,144E-02	800	9,390E-01	1100	7,396E-01	2200	6,679E-01	3700	4,391E-02
210	< 1,000E-05	510	2,703E-02	810	9,520E-01	1110	7,055E-01	2250	6,951E-01	3750	4,577E-02
220	< 1,000E-05	520	1,361E-02	820	9,611E-01	1120	6,691E-01	2300	7,234E-01	3800	4,874E-02
230	< 1,000E-05	530	5,249E-03	830	9,674E-01	1130	6,316E-01	2350	7,420E-01	3850	5,293E-02
240	< 1,000E-05	540	3,344E-03	840	9,715E-01	1140	5,930E-01	2400	7,535E-01	3900	5,778E-02
250	< 1,000E-05	550	5,402E-03	850	9,741E-01	1150	5,546E-01	2450	7,528E-01	3950	6,183E-02
260	< 1,000E-05	560	1,107E-02	860	9,757E-01	1160	5,149E-01	2500	7,462E-01	4000	6,292E-02
270	< 1,000E-05	570	8,130E-03	870	9,764E-01	1170	4,769E-01	2550	7,382E-01	4050	5,930E-02
280	< 1,000E-05	580	1,843E-03	880	9,765E-01	1180	4,398E-01	2600	7,270E-01	4100	5,118E-02
290	< 1,000E-05	590	2,794E-04	890	9,762E-01	1190	4,054E-01	2650	7,110E-01	4150	4,086E-02
300	< 1,000E-05	600	2,365E-04	900	9,754E-01	1200	3,741E-01	2700	6,734E-01	4200	3,081E-02
310	< 1,000E-05	610	3,064E-04	910	9,742E-01	1250	2,610E-01	2750	4,409E-01	4250	2,192E-02
320	< 1,000E-05	620	3,155E-04	920	9,727E-01	1300	2,294E-01	2800	3,043E-01	4300	1,498E-02
330	< 1,000E-05	630	2,321E-04	930	9,706E-01	1350	2,554E-01	2850	2,767E-01	4350	9,436E-03
340	< 1,000E-05	640	1,576E-04	940	9,682E-01	1400	2,637E-01	2900	2,666E-01	4400	5,022E-03
350	< 1,000E-05	650	1,604E-04	950	9,651E-01	1450	2,237E-01	2950	2,536E-01	4450	2,197E-03
360	< 1,000E-05	660	4,276E-04	960	9,615E-01	1500	1,946E-01	3000	2,324E-01	4500	7,882E-04
370	< 1,000E-05	670	2,431E-03	970	9,572E-01	1550	2,015E-01	3050	2,053E-01	4550	2,409E-04
380	< 1,000E-05	680	1,696E-02	980	9,520E-01	1600	2,316E-01	3100	1,763E-01	4600	6,732E-05
390	< 1,000E-05	690	7,804E-02	990	9,458E-01	1650	2,511E-01	3150	1,484E-01	4650	1,888E-05
400	< 1,000E-05	700	2,159E-01	1000	9,384E-01	1700	2,453E-01	3200	1,232E-01	4700	< 1,000E-05
410	< 1,000E-05	710	3,800E-01	1010	9,293E-01	1750	2,398E-01	3250	1,019E-01	4750	< 1,000E-05
420	< 1,000E-05	720	5,179E-01	1020	9,183E-01	1800	2,556E-01	3300	8,420E-02	4800	< 1,000E-05
430	6,155E-05	730	6,230E-01	1030	9,046E-01	1850	3,022E-01	3350	7,017E-02	4850	< 1,000E-05
440	5,118E-04	740	7,044E-01	1040	8,896E-01	1900	3,686E-01	3400	5,923E-02	4900	< 1,000E-05
450	2,924E-03	750	7,693E-01	1050	8,716E-01	1950	4,445E-01	3450	5,152E-02	4950	< 1,000E-05
460	1,124E-02	760	8,221E-01	1060	8,510E-01	2000	5,108E-01	3500	4,635E-02	5000	< 1,000E-05
470	2,674E-02	770	8,634E-01	1070	8,273E-01	2050	5,626E-01	3550	4,383E-02	5050	< 1,000E-05
480	4,130E-02	780	8,957E-01	1080	8,012E-01	2100	6,059E-01	3600	4,281E-02	5100	< 1,000E-05
490	4,486E-02	790	9,207E-01	1090	7,714E-01	2150	6,425E-01	3650	4,292E-02	5150	< 1,000E-05