

IIR-SF1

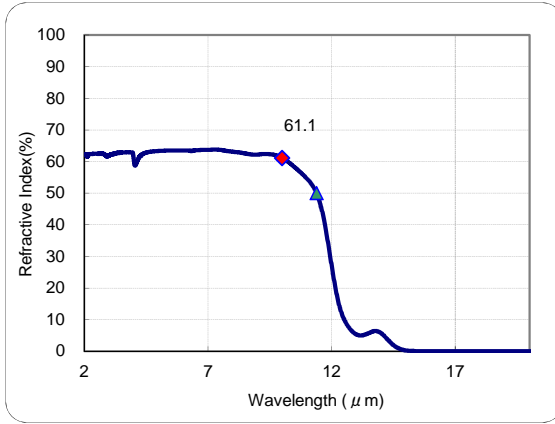
IR transmitting filter

* You can not use Macro security setting yet. Please refer to "MACRO SETTING" to use this page.

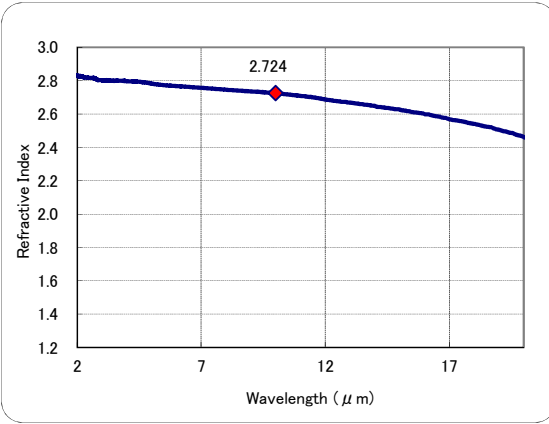
- All data are mean values of various melts.
- Change thickness and condition to check variations of data.→

Condition	Thickness	2mm
Current data are approximate values.		

● Transmittance



● Refractive index



<Meaning of sign>

λ (μ m) :Wavelength

T (%) :External Transmittance

τ :Internal Transmittance

OD :Optical Density

n_m :Refractive Index

k_m :Extinction Coefficient

◆ < Set wavelength >

▲ <Transmittance50%>

d-line(587.56nm)

e-line(546.07nm)

λ (nm)	T(%)	τ	OD	n_m	k_m
10	61.1	0.992	0.21	2.724	2.076E-05
11.4	50.0	0.965	0.30	2.702	1.114E-04
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-

λ (μ m)	T(%)	τ	OD	n_m	k_m
2	62.3	0.992	0.21	2.829	6.275E-07
2.2	62.3	0.991	0.21	2.824	8.063E-07
2.4	62.4	0.992	0.20	2.818	8.059E-07
2.6	62.5	0.992	0.20	2.817	8.751E-07
2.8	62.3	0.987	0.21	2.805	1.452E-06
3	62.0	0.981	0.21	2.802	2.270E-06
3.2	62.5	0.988	0.20	2.802	1.584E-06
3.4	62.8	0.991	0.20	2.799	1.161E-06
3.6	62.9	0.993	0.20	2.800	9.757E-07
3.8	62.9	0.994	0.20	2.799	9.191E-07
4	60.9	0.965	0.22	2.797	5.748E-06
4.2	61.1	0.966	0.21	2.796	5.755E-06
4.4	62.5	0.986	0.20	2.794	2.392E-06
4.6	63.0	0.993	0.20	2.792	1.298E-06
4.8	63.2	0.995	0.20	2.787	9.596E-07
5	63.3	0.995	0.20	2.782	9.503E-07
5.2	63.4	0.995	0.20	2.778	9.925E-07
5.4	63.5	0.995	0.20	2.774	1.019E-06
5.6	63.5	0.995	0.20	2.772	1.134E-06
5.8	63.5	0.994	0.20	2.769	1.307E-06
6	63.5	0.994	0.20	2.767	1.490E-06
6.2	63.5	0.993	0.20	2.766	1.645E-06
6.4	63.5	0.992	0.20	2.763	1.985E-06
6.6	63.6	0.994	0.20	2.761	1.606E-06
6.8	63.7	0.994	0.20	2.759	1.566E-06
7	63.7	0.994	0.20	2.757	1.604E-06
7.2	63.7	0.994	0.20	2.755	1.626E-06
7.4	63.7	0.994	0.20	2.753	1.877E-06
7.6	63.6	0.991	0.20	2.750	2.882E-06
7.8	63.3	0.986	0.20	2.748	4.331E-06
8	63.1	0.983	0.20	2.746	5.479E-06
8.2	62.9	0.980	0.20	2.744	6.572E-06
8.4	62.7	0.976	0.20	2.741	8.077E-06
8.6	62.4	0.972	0.20	2.740	9.878E-06
8.8	62.2	0.968	0.21	2.738	1.141E-05

λ (μ m)	T(%)	τ	OD	n_m	k_m
9	62.2	0.967	0.21	2.736	1.201E-05
9.2	62.4	0.969	0.21	2.734	1.146E-05
9.4	62.4	0.969	0.20	2.731	1.175E-05
9.6	62.2	0.966	0.21	2.729	1.304E-05
9.8	61.8	0.960	0.21	2.727	1.603E-05
10	61.1	0.949	0.21	2.724	2.076E-05
10.2	60.1	0.934	0.22	2.721	2.760E-05
10.4	58.9	0.916	0.23	2.718	3.633E-05
10.6	57.6	0.896	0.24	2.715	4.638E-05
10.8	56.2	0.875	0.25	2.712	5.755E-05
11	54.6	0.851	0.26	2.709	7.037E-05
11.2	52.7	0.823	0.28	2.705	8.676E-05
11.4	49.8	0.780	0.30	2.703	1.128E-04
11.6	44.9	0.704	0.35	2.697	1.618E-04
11.8	36.9	0.582	0.43	2.693	2.542E-04
12	27.1	0.431	0.57	2.687	4.023E-04
12.5	10.1	0.161	0.99	2.676	9.080E-04
13	5.3	0.084	1.28	2.668	1.280E-03
14	5.7	0.090	1.24	2.648	1.340E-03
15	0.2	0.004	2.64	2.627	3.359E-03
16	1.8E-02	2.7E-04	3.75	2.600	5.221E-03
17	3.5E-02	0.001	3.45	2.569	5.085E-03
18	2.2E-02	3.4E-04	3.65	2.541	5.717E-03
19	4.6E-02	0.001	3.35	2.505	5.517E-03
20	4.8E-02	0.001	3.32	2.462	5.769E-03
21	0.1	0.001	3.15	2.405	5.745E-03
22	0.1	0.001	3.00	2.331	5.740E-03
23	4.9E-02	0.001	3.37	2.208	6.816E-03
24	0.1	0.002	2.92	2.143	6.151E-03
25	0.6	0.008	2.24	2.170	4.834E-03

Measurement device is Spectrum100 FT-IR.(PerkinElmer)

Date14/12/09

