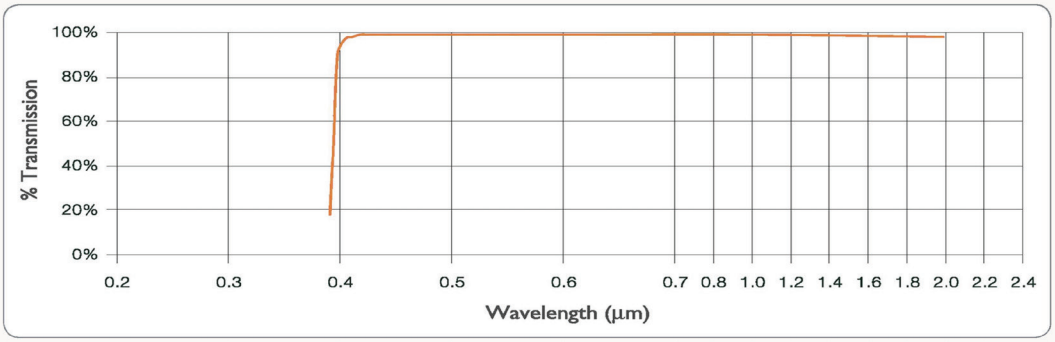
# K-PSFn202 Glass Datasheet

## K-PSFn202

Internal Transmission Curve
(5mm thickness)




## Optical Properties

| Refractive Indices* | | |
|---|---|---|
| Index | λ (nm) | Value |
| $n_{1548.1}$ | 1548.1 | 1.952 |
| $n_{1308.5}$ | 1308.5 | 1.968 |
| $n_t$ | 1014.0 | 1.991 |
| $n_r$ | 706.5 | 1.998 |
| $n_c$ | 656.3 | 2.001 |
| $n_{c'}$ | 643.8 | 2.011 |
| $n_D$ | 589.3 | 2.012 |
| $n_d$ | 587.6 | 2.023 |
| $n_e$ | 546.1 | 2.046 |
| $n_F$ | 486.1 | 2.049 |
| $n_{F'}$ | 480.0 | 2.076 |
| $n_g$ | 435.8 | 2.104 |
| $n_h$ | 404.7 | 2.163 |

| Dispersion* | |
|---|---|
| Abbe Number | Value |
| $\nu_d$ | 21.1 |
| $\nu_e$ | 21.3 |

| Coloring | |
|---|---|
| $\lambda_{80}$ / $\lambda_5$ | 44/40 |

| Standard Coatings | | |
|---|---|---|
| Coating | λ Range (nm) | Reflectivity |
| BB400 - 700 | 400 - 700 | $R_{avg}$< 0.50% |
| MLBB-B | 600 - 1050 | $R_{max}$< 1.0% |
| MLBB-C | 1050 - 1600 | $R_{max}$< 1.0% |
| MLBB-Q | 1300 - 1700 | $R_{max}$< 0.25% |

## Other Properties

| RoHS Compliance ✓ | |
|---|---|
| Lead (Pb) | < 2ppm |
| Mercury (Hg) | < 2ppm |
| Cadmium (Cd) | < 2ppm |
| Hexavalent Chromium ($Cr^{6+}$) | < 2ppm |
| PBB | < 2ppm |
| PBDE | < 2ppm |

| Mechanical Properties | |
|---|---|
| Density | 6.22 g/cm³ |
| Hardness | 484 knoop |
| Young's Modulus | 85.1 GPa |

| Thermal Properties | |
|---|---|
| $T_g$ | 460 °C |
| CTE | 7.4 x $10^{-6}$ / °C |
| dn/dT | 19.2 x $10^{-6}$ / °C |

## Applications

This material can be used in many visible to NIR applications, including telecommunications, and more specifically, with transceivers and tunable lasers.

LightPath® lenses that have a 374xxx prefix use the K-PSFn202 glass.

*All sections noted with an asterisk represent glass characteristics after molding.

LightPath® TECHNOLOGIES

2603 Challenger Tech Ct. Suite 100, Orlando, FL 32826 | 1-800-472-3486 | www.lightpath.com