Borosilicate
SCHOTT D263® Colorless Thin Glass

Description:
SCHOTT D263® is a thin borosilicate glass with low alkali content produced with extremely pure raw materials making it highly chemical resistant. It is produced in a special draw process that results in excellent surface quality that can be coated without any post-process surface work. The combination of these traits makes D263® highly versatile.

Features:
- Extremely flat surfaces
- Wide range of thicknesses (0.030mm – 1.1mm)
- Very good substrate for optical coatings
- Excellent transmission over a large spectrum
- Low level mobility of alkali ions
- Coefficient of thermal expansion close to ceramic
- High chemical resistance
- Smooth fire polished surface

Applications:
- Liquid crystal displays (LCD's)
- Touch screens
- Optoelectronics (opto-caps in laser diodes)
- Solar cells

Physical Properties:

Mechanical:
- Density (25°C) ρ: 2.51 g/cm³, 156.7 lb/ft³
- Young’s Modulus E: 72.9 kN/mm², 10.6 Mpsi
- Poisson’s Ratio μ: 0.208
- Knoop Hardness HK0.120: 590
- Bending strength σ: 30.1 kN/mm², 4.4 Mpsi

Viscosity:
- Softening Point (10⁷.6 poises): 736°C, 1357°F
- Annealing Point (10¹³ poises): 557°C, 1035°F
- Strain Point (10¹⁴.5 poises): 529°C, 984°F

Thermal Expansion:
- 0 – 300°C (32 – 572°F): 7.2 x 10⁻⁶/K

Optical:
- Index of Refraction @ ne: 546nm: 1.5255
  @ nd: 588nm: 1.5231

Electrical:
- Log10 Volume Resistivity:(250°C, 482°F): 1.6 x 10⁸
  (350°C, 932°F): 3.5 x 10⁶

Dimensions:
- Thicknesses: 0.030mm – 1.1mm
- Sizes: Up to 17” x 14” (431.8 x 355.6mm)
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SCHOTT D263® Colorless Thin Glass (cont.)