

S-LAH79 Ball Lenses

Ohara manufactures polished ball lenses that offer high Numerical Aperture (NA) performance for efficient coupling of active and passive fiber optic components. Several glass types are available including S-LAH79, S-BSL7 (BK7) and Fused Silica. These ball lenses are also suitable for use in the molding of small diameter aspherical lenses.



ADVANTAGES

- High Refractive Index Glass S-LAH79 (Nd 2.003)
- Other Glass Types Available : S-BSL7 (BK7), Fused Silica, etc.
- Low Insertion Loss
- Low, Isotropic Birefringence (<math><10\text{nm/cm}</math>)
- Long-Term Thermal and Environmental Stability

SPECIFICATIONS

Items	Specifications
Diameter (mm)	1.0~ 5.0 mm
Range of Diameter (μm)	± 3.5
Sphericity (μm)	3
Surface Accuracy	$\leq \lambda/2$

S-LAH79 Glass Properties

Glass Specification			S-LAH79
Optical Properties	Refractive Index	n_{1530}	1.955
		n_c	1.994
		n_d	2.003
		n_F	2.028
	Abbe Number	V_d	28.3
	Internal Transmittance	1600 nm 1mmt	99.7%
		1600 nm 3mmt	99.8%
		1000 nm 1mmt	99.7%
1000 nm 3mmt		99.7%	
Coloring	λ_{70}/λ_{5}	46/37	
Thermal Properties	CTE(x10-7/°C)	(-30~+70°C)	60
		(+100~+300°C)	71
	Transformation Temperature	Tg (°C)	699
	Yield Point	At (°C)	731
Mechanical Properties	Specific Gravity		5.23
	Knoop Hardness	Hk (Class)	7
	Abrasion	Aa	61
	Young's Modulus	E (G Pa)	1255
	Rigidity Modulus G	G (G Pa)	484
	Poisson's Ratio		0.297
Chemical Properties	Water Resistance	RW(p) (Class)	1
	Acid Resistance	RA(p) (Class)	1
	Weathering Resistance	W(s) (Class)	2

Please contact us to discuss your specific requirements.