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Graient Index(GRIN) Micro Lens



ACP's ALC® is a micro gradient index (GRIN) lens. It is designed for use in demanding telecommunication and data communication applications. The nominal numerical aperture (NA) of ALC family is 0.46. ALC lenses may have different dimensions and surface finishes. The diameter of ALC lenses is 1.0 mm or 1.8mm. Because of its very low insertion loss, ALC lense can be used in optical isolators, collimators, coupling, and WDM devices.

Key Features

- Low Insertion Loss
- Low Price
- Drop-in Replacement for SELFOC Lens and C-lens

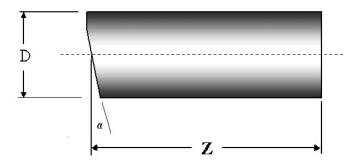
Applications

- Optical Isolators
- Optical Switches
- Collimators
- Coupling
- WDM Devices

Performance Specifications

Parameter	Specifications				
Grade	Р	A			
Insertion Loss (at 1550nm)	≤ 0.15dB	≤ 0.20dB			
Polarization Reservation	0.99				
Pitch (Max.)	0.5p				
Material	Proprietary GRIN optical glass material				
Lens Length (Z) Tolerance	± 2.5%				
Lens Diameter Tolerence	+ 0.005/ - 0.010				
Thermal Expansion Coefficient	10 X 10-6/°C				
Operating Temperature	200°C				
Surface Quality	HI 1060				
Fiber Length (Min.)	No defects, scratches greater than 0.03nm, no more than 3 defects or scratches from 0.01mm to 0.03mm. No chips within 90% of the lens diameter				
Young's Modulus	6,000 - 8,000 Kgf/mm				

Mechanical Dimensions



- D: Dimeter of the lens.
- a: The angle of one end of the lens.
- Z: Lens length

Ordering Information

ALC					
	Diameter	Pitch	Wavelength	Coating	Angle
	10 = 1.0mm 18 = 1.8mm	230 = 0.23p 250 = 0.25p 245 = 0.245p	1310=1310nm 1550=1550nm	AR2 = Both sides AR Coated AR1 = One side AR Coated NC0 = Not coated	8 = 8 deg. 6 = 6 deg.