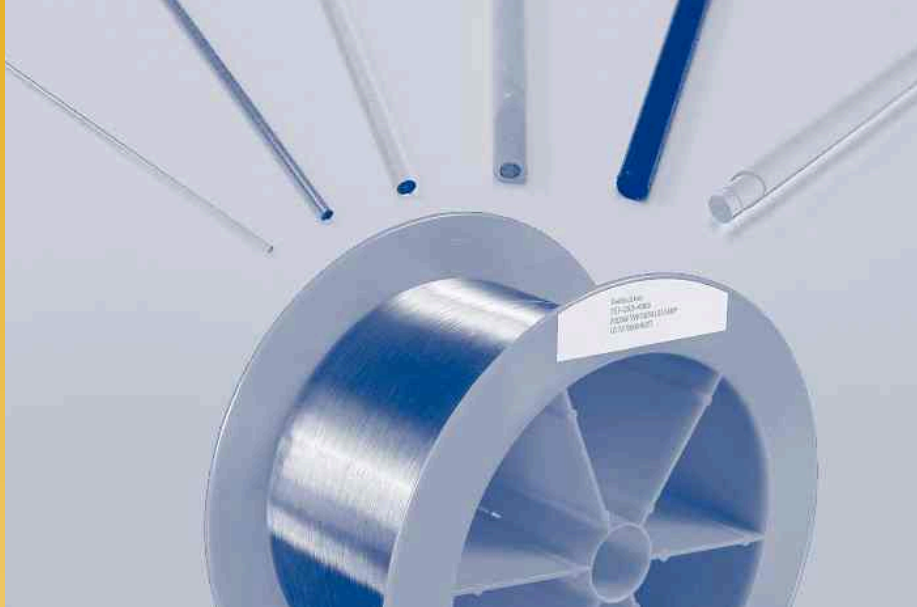


## Borosilicate Glass Fiberoptics



### DESCRIPTION

Borosilicate Glass fibers, also known as cheap glass or low temperature glass, have been used for fiberoptic light piping or all kinds for many years. If the application falls within the visible to the very near infrared portion of the spectrum and requires assembly lengths of 20ft (6M) or less, then you might find that borosilicate glass assemblies offer the most cost effective solution. This material typically boasts a high NA giving it superior light gathering ability and it is very small in size allowing

robust, tightly packed, very flexible assemblies to be made. This fiber is ubiquitous in fiberoptic illuminators for microscopes and other short length, big aperture light piping applications. It is however, significantly more lossy than silica based fibers, is not commonly available in more than just a few sizes, and would not be recommended in critical spectroscopic or laser delivery applications.

### APPLICATIONS

- Spectroscopy
- Illumination
- Sensors
- Microscopy
- Medical
- Efficient bundles and arrays

### PROPERTIES

- Step index profile
- Borosilicate construction
- NA 0.55 to 0.66
- -40°C to +275°C operation
- High core to clad ratio
- Transmits 400nm to 1300nm

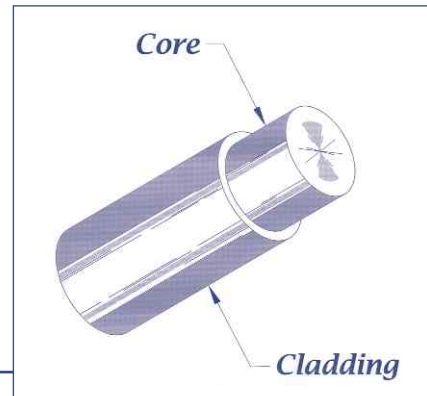
# Borosilicate Glass Fiberoptics

## CHARACTERISTICS

- 0.55NA (33 Deg 1/2 Angle)  
Nominal (other NAs available)
- 50µm Fiber Diameter  
Standard (other sizes available)
- Core/Clad Ratio 83%
- Long Term Bend Radius -  
300 times the Fiber Diameter
- Operating Temperature to  
-40°C to +100C
- Sheathing – Many Options

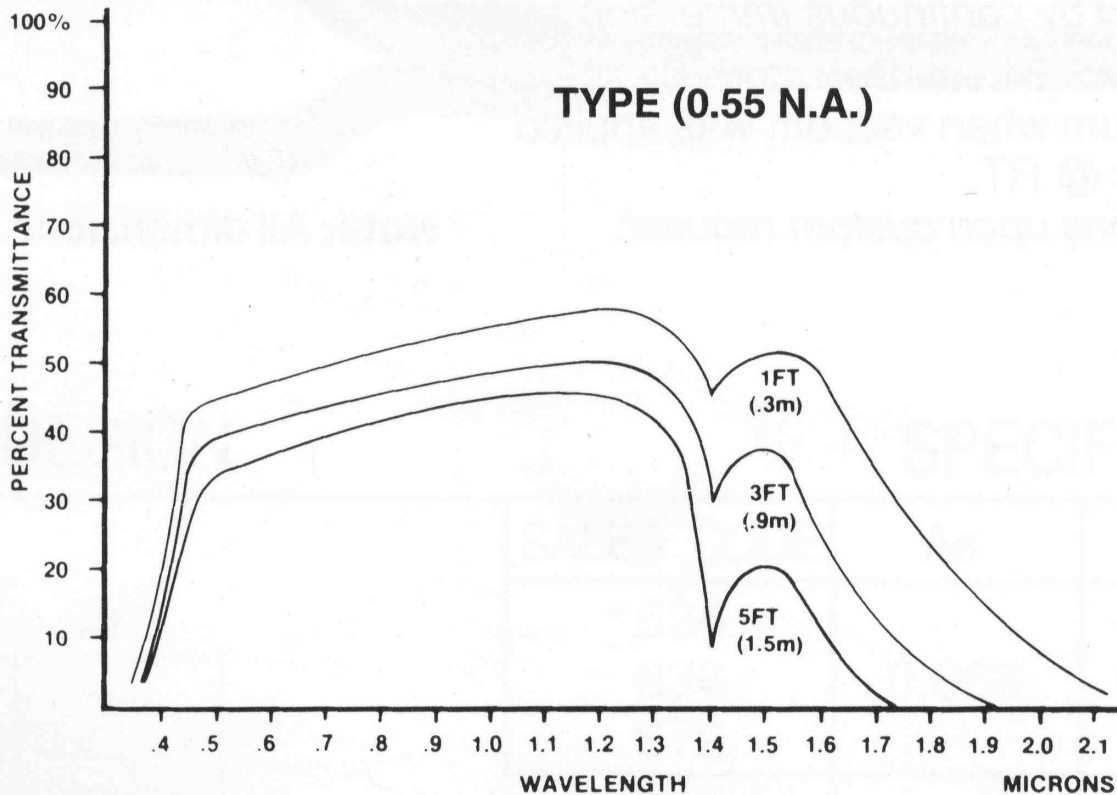
## NOTES

- This fiber is sold in bundle format only, and can have virtually any end fitting installed, including custom fittings.
- Curves are represent typical transmission of fully assembled bundles and include all loss mechanisms.



## GLASS FIBER OPTIC TRANSMITTANCE

### TYPE (0.55 N.A.)



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