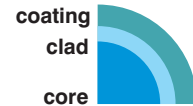


# GRADED-INDEX FIBERS

## Features

- Standard communication fibers for 850 nm and 1300 nm
- Low loss, high bandwidth
- Laser power transmission fibers up to 600  $\mu\text{m}$  core diameter
- Better beam profile than step index fibers
- Specialty coatings for high temperatures, high vacuum and harsh chemicals environments
- Radiation resistant type



## Fiber-Design

- Communication fibers:
  - Doped fused silica core (graded-index)
  - Pure fused silica cladding
  - Dual layer Acrylate coating (-40°C to 85°C)
- Power transmission fibers:
  - Doped fused silica core (graded-index)
  - Pure fused silica cladding
  - Acrylate coating (-40°C to 85°C)
  - Silicone resin coating (-40°C to 150°C)
  - Polyimide coating (-190°C to 385°C)

## Properties

- Proof test level (Screen test): 50 kpsi (Communication fibers)
- Proof test level (Bend method): 70 kpsi (Fiber diameter > 200  $\mu\text{m}$ )
- Bend radius:
  - momentary 100 times the fiber radius
  - long term 600 times the fiber radius

## Options

- Core/clad ratios 1.1, 1.2
- Metal coating
- Jacket:
  - Nylon (-40°C to 100°C)
  - ETFE (-200°C to 150°C)
- Connectors (DIN, FC/PC, ST, SMA)
- Graded-index fiber cables

## GRADED-INDEX FIBERS

<b>ACRYLATE COATED FIBERS</b>	Product code	Core ( $\mu\text{m}$ ) $\pm$ 2%	Cladding ( $\mu\text{m}$ ) $\pm$ 2%	Coating ( $\mu\text{m}$ ) $\pm$ 5%	Coating Material	NA $\pm$ 0.015
(-40°C to 85°C)	G 100/140A	100	140	200	Acrylate	0.290
	G 200/280A	200	280	450	Acrylate	0.290
	G 400/560A	400	560	700	Acrylate	0.290
	G 600/840A	600	840	1000	Acrylate	0.290

<b>POLYIMIDE COATED FIBERS</b>	Product code	Core ( $\mu\text{m}$ ) $\pm$ 3 $\mu\text{m}$	Clad ( $\mu\text{m}$ ) $\pm$ 3 $\mu\text{m}$	Coating ( $\mu\text{m}$ ) $\pm$ 3 $\mu\text{m}$	NA $\pm$ 0.015	Attenuation 850/1300 nm (dB/km)	Bandwidth 850/1300 nm (MHz*km)
(-190°C to 385°C)	G 50/125PI	50	125	140	0.200	<2.8/0.9	>400/1200
	G 62.5/125PI	62.5	125	140	0.275	<3.3/1.0	>200/600
	G 85/125PI	85	125	140	0.260	<3.3/1.0	>200/200
	G 100/140PI	100	140	155	0.290	<4.0/1.5	>200/200
	G 200/280PI	200	280	300	0.290		
	G 400/560PI	400	560	580	0.290		

<b>COMMUNICATION FIBERS</b>	Product code	Core ( $\mu\text{m}$ ) $\pm$ 3 $\mu\text{m}$	Clad ( $\mu\text{m}$ ) $\pm$ 3 $\mu\text{m}$	Coating ( $\mu\text{m}$ ) $\pm$ 3 $\mu\text{m}$	NA $\pm$ 0.015	Attenuation 850/1300 nm (dB/km)	Bandwidth 850/1300 nm (MHz*km)
(-190°C to 385°C)	G 50/125	50	125	250	0.200	<2.5/0.6	>400/1200
	G 62.5/125	62.5	125	250	0.275	<3.0/0.7	>200/600
	G 85/125	85	125	250	0.260	<3.0/0.7	>200/200
	G 100/140	100	140	250	0.290	<3.5/1.0	>200/200

Other specifications upon request.