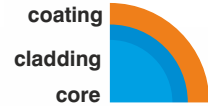


GRADED-INDEX FIBERS

Features

- Standard communication fibers for 850 nm and 1300 nm
- Low loss, high bandwidth
- Laser power transmission fibers up to 600 μm 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 μm)
- Bend radius: momentary 100 times the fiber radius long term 600 times the fiber radius

Options

- Core/clad ratios 1.4 ... 2,5
- Metal coating
- Buffer:
 - Nylon (-40°C to 100°C)
 - ETFE (-200°C to 150°C)
- Connectors (DIN, FC/PC, ST, SMA)
- Graded-index fiber cables
- high temperatur acrylate (-40°C to 200°C)

GRADED-INDEX FIBERS

| ACRYLATE COATED FIBERS | Product code | | Core (μm) $\pm 2\%$ | Cladding (μm) $\pm 2\%$ | Coating (μm) $\pm 5\%$ | Coating Material | NA ± 0.015 |
|------------------------|--------------|---|----------------------------------|--------------------------------------|-------------------------------------|------------------|----------------|
| (-40°C to 85°C) | G 100/140 | A | 100 | 140 | 200 | Acrylate | 0.290 |
| | G 200/280 | A | 200 | 280 | 450 | Acrylate | 0.290 |
| | G 400/560 | A | 400 | 560 | 700 | Acrylate | 0.290 |
| | G 600/840 | A | 600 | 840 | 1000 | Acrylate | 0.290 |

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

| COMMUNICATION FIBERS | Product code | | Core (μm) $\pm 3\mu\text{m}$ | Cladding (μm) ± 3 | Coating (μm) $\pm 3\mu\text{m}$ | NA ± 0.015 | Attenuation 850/1300 nm | 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.