

## IG – 50/125/145 - PI300

**j-fiber's 50µm Graded Index Multimode fiber solution with an extended operating temperature range: The graded index core consists of Ge doped fused silica and is surrounded by a pure silica cladding. The coating material withstands high temperature fluctuations.**

### Application

- Fiber Optic Sensors
- Data Transmission
- Data Communication (short distances)

All fibers and preforms are subject to j-fiber's ongoing process and quality improvement programs ensuring excellent performance and high reliability. We reserve the right to make changes to the above specifications without notice.

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Officially registered facility according to EWG No. 761/2001



For further information about our Multimode Fiber and other j-fiber products and services, please contact us:

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### Optical Characteristics

		Spec. Value Range	Unit
Attenuation Coefficient	850nm	≤ 2.4 – ≤ 2.6	dB/km
	1300nm	≤ 0.6 – ≤ 0.8	dB/km
Bandwidth Assuming a linear relationship	850nm	≥400 - ≥750	MHz·km
	1300nm	≥500 - ≥1200	MHz·km
Numerical Aperture		0.200 ± 0.015	
Effective Group Index of Refraction	850nm	1.483	
	1300nm	1.478	

### Geometrical Characteristics

	Spec. Values	Unit
Core Diameter	50 ± 2.5	µm
Core Non-Circularity	≤ 5.0	%
Core/Clad Concentricity Error	≤ 1.5	µm
Cladding Diameter	125 ± 2.0 / ± 1.0	µm
Cladding Non-Circularity	≤ 2.0	%
Coating Diameter	145 ± 5.0	µm
Standard Lengths	1.0 - 8.8	km

### Coating Description

	Spec. Values	Unit
Coating Material	Polyimide	
Operating Temperature Range Intermittent	- 65 to + 300	°C
	-190 to +420	°C

### Mechanical Characteristics

	Spec. Values	Unit
Proof Test	≥ 50	kpsi
	≥ 4.4	N

### Ordering Information

To order j-fiber optical fiber please call, fax or email us and specify the following parameters:

Fiber Type:	j-fiber Multimode Fiber 50/125/145µm PI 300 Extended Operating Temperature Range
Desired Attenuation, Bandwidth:	at 850nm / 1300nm
Fiber Quantity:	kms
Other:	desired ship date, reel length, special requests