

## 62.5/125/5000µm Multimode Optical Fiber

### Product Information

Issue Date: 2004/5/25

This specification conforms to the requirement of IEC 60793 A1b and IEC 11801OM1.

#### OPTICAL CHARACTERISTICS

| Characteristics   | Conditions | Specified Values  | Unit       |
|---|------------|-------------------|------------|
| Attenuation Coefficient                                 | 850 nm     | $\leq 3.0$        | [ dB/km ]  |
|   | 1300 nm    | $\leq 0.8$        | [ dB/km ]  |
| Numerical Aperture                                      |            | $0.275 \pm 0.015$ |            |
| Bandwidth<br>(*Higher bandwidth available upon request) | 850 nm     | $\geq 200$        | [ MHz·km ] |
|   | 1300 nm    | $\geq 500$        | [ MHz·km ] |

#### BACKSCATTER CHARACTERISTICS

|                                    |         |             |           |
|------------------------------------|---------|-------------|-----------|
| Attenuation Directional Uniformity |         | $\leq 0.05$ | [ dB/km ] |
| Attenuation Uniformity             |         | $\leq 0.05$ | [ dB ]    |
| Group Index of Refraction          | 850 nm  | 1.491       |           |
|                                    | 1300 nm | 1.486       |           |

#### PHYSICAL CHARACTERISTICS

|   |  |                |          |
|---|--|----------------|----------|
| Core Diameter   |  | $62.5 \pm 3.0$ | [ µm ]   |
| Core Non- circularity   |  | $\leq 5$       | [ % ]    |
| Core / Cladding Concentricity Error   |  | $\leq 3.0$     | [ µm ]   |
| Cladding Diameter   |  | $125 \pm 1$    | [ µm ]   |
| Cladding Non-Circularity  |  | $\leq 2.0$     | [ % ]    |
| Coating Diameter  |  | $495 \pm 15$   | [ µm ]   |
| Clad/Coat Concentricity Error   |  | $\leq 12$      | [ µm ]   |
| Fiber curl  |  | $\geq 2$       | [ m ]    |
| Proof Test  |  | 100            | [ kpsi ] |
| Bend Induced Attenuation at 1300 nm<br>(100 turns around a mandrel of 75 mm diameter) |  | $\leq 0.5$     | [ dB ]   |
| Coating Strip Force (Typical)   |  | 130            | [ g ]    |
| Length (Typical)  |  | 4.4            | [ km ]   |

#### ENVIRONMENTAL CHARACTERISTICS

|   |  |            |           |
|---|--|------------|-----------|
| Temperature Dependence at 850 nm and 1300 nm<br>Induced Attenuation – 60°C to +85°C         |  | $\leq 0.2$ | [ dB/km ] |
| Watersoak Dependence at 850 nm and 1300 nm<br>Induced Attenuation at 20°C for 30 days       |  | $\leq 0.2$ | [ dB/km ] |
| Damp Heat Dependence at 850 nm and 1300 nm<br>Induced Attenuation at 85°C, 85%R.H., 30 days |  | $\leq 0.2$ | [ dB/km ] |

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