



# ORNET



## Giga™

### Description

- Provides gigabit multimode fiber as the solution for emerging high speed local area network.
- The superior performance of Giga™ surpasses the minimum requirements specified by IEEE802.3z and enhances your system performance with reliability.
- Giga™ supports current indoor and premises network with superior performance up to 2,000m transmission length.
- Giga™ 62.5E guarantees the minimum transmission length of 500m for 850nm and 1000m for 1300nm. Giga™ 50E guarantees 600m for 850nm and 2000m for 1300nm.
- Giga™ 50XE is optimized for 10GbE and Fibre Channel applications.
- The safe transmission length exceeds 300m for the system compatible with 10Gbase-SW/SR.
- Giga™ series products of high performance and reliability are the best solutions for your system.

### Geometrical Specifications

#### Glass Geometry

|                             |              |
|-----------------------------|--------------|
| Cladding Diameter           | 125 ± 1.0 μm |
| Core-Cladding Concentricity | 3.0 μm       |
| Cladding Non-Circularity    | ≤ 1.5%       |
| Core Non-Circularity        | ≤ 5.0%       |

#### Coating Geometry

|                             |              |
|-----------------------------|--------------|
| Cladding Diameter           | 245 ± 1.0 μm |
| Core-Cladding Concentricity | ≤ 10.0 μm    |

Standar Length(km/reel)                      2.2~8.8km

### Mechanical Specifications

#### Proof Test

|   |                                       |
|---|---------------------------------------|
| The entire fiber length is subjected to a tensile proof | Stress 100kpsi(0.7GN/m <sup>2</sup> ) |
|---|---------------------------------------|

\*Higher Proof test levels are available

#### Coating

|                     |                    |
|---------------------|--------------------|
| Coating Strip Force | 1.3N ≤ S.F ≤ 8.3N  |
| Pulout Force        | 6.2N ≤ P.F ≤ 22.2N |

### Environmental Specifications

| Test Condition                                  | Induced Attenuation (dB/km) |        |
|---|-----------------------------|--------|
|   | 850nm                       | 1300nm |
| Temperature Dependence<br>-65°C to +85°C        | ≤ 0.20                      | ≤ 0.20 |
| Temp-Humid Cycling<br>-10°C to +85°C (4~98% RH) | ≤ 0.20                      | ≤ 0.20 |

| Test Condition | Induced Attenuation (dB/km) |         |
|----------------|-----------------------------|---------|
|                | 50.0 μm                     | 62.5 μm |
| 850nm          | 1.483                       | 1.496   |
| 1300nm         | 1.479                       | 1.487   |

Fatigue Resistance Parameter(nd)                      20



Table 1. Transmission length properties of Giga™

| Items   | Transmission Length (m) |        | Optical Properties |        |                            |        |     |
|---------|-------------------------|--------|--------------------|--------|----------------------------|--------|-----|
|         |                         |        | Bandwidth (MHz.km) |        | Optical Attenuation(dB/km) |        |     |
|         | 850nm                   | 1300nm | 850nm              | 1300nm | 850nm                      | 1300nm |     |
| 1 Gbps  | GipaPass™ 62.5          | 300    | 550                | 200    | 400                        | 2.8    | 0.7 |
|         | GipaPass™ 62.5E         | 500    | 1000               | 200    | 600                        | 2.4    | 0.6 |
|         | GipaPass™ 50            | 600    | 600                | 400    | 800                        |        |     |
|         | GipaPass™ 50E           | 600    | 2000               | 500    | 1000                       |        |     |
| 10 Gbps | GipaPass™ 50X           | 150    | -                  | 800    | 500                        | 2.4    | 0.6 |
|         | GipaPass™ 50XE          | 300    | -                  | 800    | 500                        |        |     |
|         | GipaPass™ 50XXX         | 550    | -                  | 3500   | 500                        |        |     |

