

## Non-Zero Dispersion Shifted Single Mode Fiber G.656

### Specifications:

**Fiber type G.656**

**OPK code 656**

**Rev. 011-21/41**

<b>Fiber type</b>	<b>G.656</b>
<b>OPK code</b>	<b>656</b>
Core	Germanium doped Silica
Cladding	Pure Silica
Coating	Dual layers of UV-cured acrylate

### Optical Characteristics

Attenuation coefficient Loose tube Cables (Typical / Maximum)

@1550 nm 0.23 / 0.4 dB/km

@1625 nm 0.26 / 0.4 dB/km

Attenuation coefficient Tight Buffered Cables (Typical / Maximum)

@1550 nm 0.26 / 0.4 dB/km

@1625 nm 0.31 / 0.4 dB/km

Point of discontinuity at 1550 nm  $\leq 0.15$  dB

Cable cut-off wavelength  $\leq 1450$  nm

Chromatic dispersion at 1530 ~ 1565 nm 5.5 - 10.0 ps/(nm·km)

Chromatic dispersion at 1565 ~ 1625 nm 7.5 - 13.5 ps/(nm·km)

Uncabled fiber PMD  $\leq 0.1$  ps/Ökm

### Geometrical Characteristics

Mode field diameter @1550 nm  $9.2 \pm 0.5$   $\mu$ m

Core/Cladding concentricity error  $\leq 0.5$   $\mu$ m

Cladding diameter  $125.0 \pm 1.0$   $\mu$ m

Cladding non-circularity  $\leq 0.7\%$

Primary coating diameter (uncoloured fibre)  $242 \pm 5$   $\mu$ m

Primary coating diameter (coloured fibre)  $250 \pm 10$   $\mu$ m

Fibre curl radius  $\geq 4.0$  m

Coating-Cladding concentricity  $\leq 12 \mu\text{m}$

### Macrobending loss

100 turns, mandrel diameter 60 mm @1550 nm  $\leq 0.05 \text{ dB}$

100 turns, mandrel diameter 60 mm @1625 nm  $\leq 0.05 \text{ dB}$

1 turns, mandrel diameter 32 mm @1550 nm  $\leq 0.5 \text{ dB}$

1 turn, mandrel diameter 32 mm @1625 nm  $\leq 0.5 \text{ dB}$

### Mechanical Characteristics

Proof test level  $\geq 100 \text{ kpsi (1.0\% strain)}$

Coating strip force  $1.3 \sim 8.9 \text{ N}$

Dynamic fatigue resistance parameter  $\geq 20$

Typical attenuation is the value measured for at least 90% of the fibers in the cable.

OTDR measurement values can only be guaranteed for cable lengths of 1000 m and more.

Cable on the reel may show an discontinuity of the OTDR curve caused by winding of the cable on the reel.