

# CORNING



## PANDA PM Thermally-diffused Expanded Core (TEC)

### Specialty Optical Fibers

PANDA PM Specialty Fibers are designed with the best polarization maintaining properties, and are the industry standard in the world today. Thermally-diffused Expanded Core (TEC) is a polarization maintaining optical fiber (PANDA fiber) optimized for operation in the wavelength range around 1.55  $\mu\text{m}$ .

PANDA PM Specialty Optical Fiber design uses two stress applying parts to create an extremely high birefringence, resulting in fiber with excellent polarization maintaining properties. This design was invented and patented by Corning Incorporated. Corning continues to have a manufacturing partnership with Fujikura Ltd.

### Key Optical Specifications

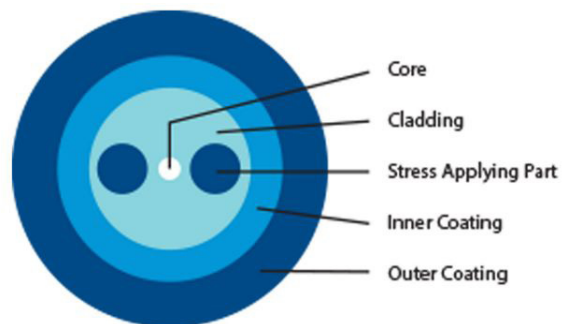
Part Number	HA15-PS-U25D(TEC)
Operating Wavelength (nm)	1550
Cutoff Wavelength (nm)	$\leq 1480$
Maximum Attenuation (dB/km)	$\leq 30$
Mode-field Diameter ( $\mu\text{m}$ )	$4.0 \pm 0.3$
Maximum Beat Length (mm)	$\leq 4.0$
Polarization Crosstalk (dB/2 m)	$\leq -35$

### Applications

- Spot size converters
- Low-loss coupling with silicon photonic waveguides
- Photonic packaging
- Polarization sensitive components

### Features

- High Numerical Aperture
- Increased expansion speed of the fiber core
- Extremely high birefringence
- Low insertion loss
- Excellent dimensional uniformity



# Key Geometric, Mechanical, and Environmental Specifications

Part Number	HA15-PS-U25D(TEC)
Cladding Outside Diameter ( $\mu\text{m}$ )	$125 \pm 1.0$
Coating Outside Diameter ( $\mu\text{m}$ )	$245 \pm 15$
Core-to-Cladding Concentricity ( $\mu\text{m}$ )	$\leq 0.5$
Operating Temperature ( $^{\circ}\text{C}$ )	- 40 to +85
Proof Test level (kpsi)	100
Coating	UV Curable Acrylate
Minimum Bending Radius (mm)	$\geq 30$

For more information about Corning's leadership in Specialty Fiber technology, visit our website at [www.corning.com/specialtyfiber](http://www.corning.com/specialtyfiber)  
To obtain additional technical information, an engineering sample or to place an order for this product, please contact us at:

Corning Incorporated



Tel: +1-607-974-9974  
Fax: +1-607-974-4122  
E-mail: [specialtyfiber@corning.com](mailto:specialtyfiber@corning.com)

© 2019 Corning Incorporated