



Our proprietary bismuth-oxide-based glass enables not only broad spectral

bandwidth, but compactness required for the next generation WDM optical amplifiers.

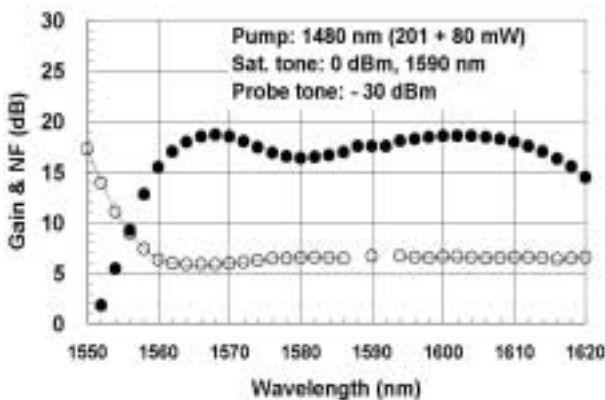
The T1L EDF is tailored to extended L and L band EDFAs using 1480 nm pumping among the range of our products utilizing bismuth. Unrivalled 60 nm of 3dB-bandwidth is realized in the optimum conditions.

### Applications

- Extended L band amplifiers and L band amplifiers
- Compact metro amplifier with very flat gain profile

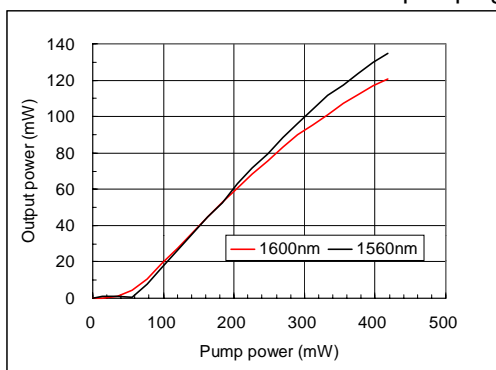
### Typical gain profile and NF

The following chart shows the pigtailed (fusion spliced) T1L-250-P EDF's gain and noise characteristics employing probe method. You can see big extension of gain bandwidth up to 1620 nm.



### Typical power conversion efficiency

The PCE is measured at 1560 nm and 1600 nm with 1480 nm balanced bi-directional pumping.



### Specifications

#### Mechanical items

Clad diameter	: 125 μm
Coating diameter	: 250 μm
Core diameter	: 4.5 μm
Core/clad concentricity	: < 1 μm
Tensile strength	: > 1 GPa
Static fatigue parameter	: 26.9
Proof test	: TBD

#### Optical items

Erbium ion concentration	: 3250 wt. ppm
Peak absorption around 1530 nm	: 133 dB/m
Peak absorption around 1480 nm	: 83 dB/m
Peak absorption around 980 nm	: 73 dB/m
Mode field diameter at 1550 nm	: 6.2 μm
Cutoff wavelength	: 1.18 μm
Numerical aperture	: 0.20
Core/clad refractive index at 1550 nm	: 2.03/2.02
Background loss at 1310 nm	: < 1 dB/m
Splice loss to HI980® fiber or equivalent (pigtailed EDF)	: < 1 dB
Return loss at splice point (pigtailed EDF)	: > 55 dB

#### Reliability qualification

Telcordia® GR-1221-CORE	: Passed
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### Ordering information

For further information, questions and availability, please contact the following division.

NB-1, New Business Development and Technology Planning

Division,

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Product numbering form

T1L-□□□-□

↑↑↑ ↑ P: pigtailed, F: as cut  
 Length (cm)