

SPECIALTY FIBER BISMUTH DOPED FIBER

Bi-Ge - CODOPED
SINGLE MODE FIBER

ARTICLE BGDF-SM-7/125-1430 and BGDF-SM-7/125-1430-HC

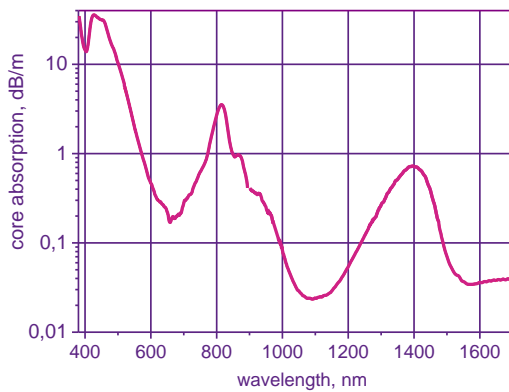
Bismuth-Germanium codoped fiber BGDF-SM-7/125-1430 and BGDF-SM-7/125-1430-HC series is specially designed for typical application for amplifiers, lasers, superfluorescent fiber sources operating at 1370-1490nm.

The fibers with article BGDF-SM-7/125-1430-HC has more attractive core absorption and typ.gain and shorter length is required to achieve the result.

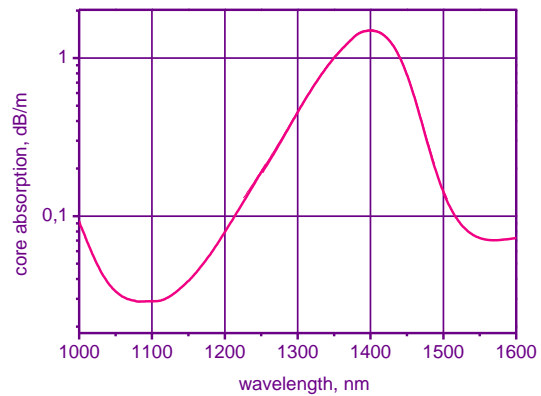
Minimal fiber length required for 25 dB gain at 1430 nm L=85m (actual length depends on pump and signal power)

Minimal fiber length required for 25 dB gain in the range 1.41-1.45 L=100m (actual length depends on pump and signal power)

BGDF-SM-7/125-1430



BGDF-SM-7/125-1430-HC



FIBER SPECIFICATIONS	BGDF-SM-7/125-1430	BGDF-SM-7/125-1430-HC
Core diameter, μm		6.5 ± 0.6
Clad diameter, μm		125 ± 5
Coating diameter, μm		230 ± 20
Coating material type		Silicon rubber
Core NA		0.14 ± 0.02
Cutoff wavelength, μm		1.15 ± 0.1
Amplification range (-3dB), μm		$1.41 \div 1.45$
Core absorption (1310 nm), dB/m	0.3 ± 0.06	0.53 ± 0.1
Typ. peak gain (@1430 nm), dB/m	> 0.3 ($P_p \sim 200\text{mW}$ @ 1310 nm)	> 0.5 ($P_p \sim 200\text{mW}$ @ 1310 nm)
Typ. gain (@1410 \div 1450nm), dB/m	> 0.2 ($P_p \sim 200\text{mW}$ @ 1310 nm)	> 0.33 ($P_p \sim 200\text{mW}$ @ 1310 nm)
Typical laser eff-cy		$> 50\%$ (vs pump power at 1310 nm)
Splice loss with SMF28 (@1310nm), dB		~ 0.2

Other parameters are available on the request