

Polarization-Maintaining Erbium-Doped Fiber



● Product Description

This Erbium-doped single-clad PM fiber features a high absorption and high birefringence that make this product the ideal solution for the design of eye-safe PM fiber lasers and amplifiers for a wide range of 1.5 μm applications.

● Part Number

ER50-PM-6/125

● Product features

High absorption– reduces nonlinear effects、 High birefringence – minimizes stress、 Provides highly efficient energy transfer – minimizing pump power requirements、 Low background losses

● Application area

Ultrafast fiber lasers & amplifiers、 LiDAR、 Second Harmonic Generation、 Medical、 Scientific

Specifications

PN#/Parameters			ER7-PM-6/125	ER14-PM-6/126	ER30-PM-6/125	ER50-PM-6/125
Optical specs	Cutoff Wavelength	nm	≤ 1300	≤ 1300	≤ 1300	≤ 1300
	Core NA		0.22 ± 0.02	0.22 ± 0.02	0.26 ± 0.02	0.26 ± 0.02
	Core Absorption @ 1530 nm	dB/m	7.0 ± 2.0	14.0 ± 3.0	30.0 ± 3.0	50.0 ± 5.0
	Birefringence coefficient	10^4	≥ 3.5	≥ 3.5	≥ 3.5	≥ 3.5
	Mode Field Diameter@1550nm	μm	5.5 ± 1.0	5.0 ± 1.0	5.0 ± 1.0	5.5 ± 1.0
	Cladding diameter	μm	125.0 ± 1.0	125.0 ± 1.0	125.0 ± 1.0	125.0 ± 1.0
Geometric&mechanical specs	Coating diameter	μm	245.0 ± 5.0	245.0 ± 5.0	245.0 ± 5.0	245.0 ± 5.0
	Core Concentricity Error	μm	≤ 0.5	≤ 0.5	≤ 0.5	≤ 0.5
	Cladding shape		Circle,Panda	Circle,Panda	Circle,Panda	Circle,Panda
	Coating material	-	High refractive index coating	High refractive index coating	High refractive index coating	High refractive index coating
	Matrix material		SiO2	SiO2	SiO2	SiO2
	Proof Test (kpsi)	kpsi	≥ 100	≥ 100	≥ 100	≥ 100