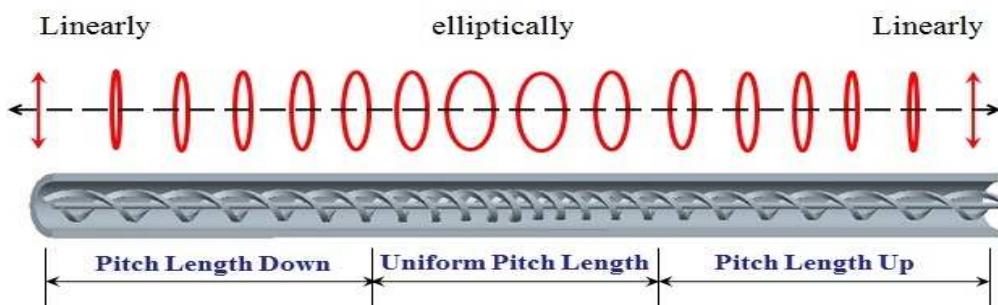


SPUN-T Fiber Description and Polarization State Evolution

The controllably-spun birefringent-fiber or all fiber polarization transformer consists essentially of a long spun high-birefringence fiber, fabricated by slowly varying the spin rate of a birefringent fiber preform from very slow to very fast then back to very slow while the fiber is being drawn. The evolution of the eigenstate from a linear polarization state to an elliptical polarization state, then to a linear polarization state again, induced by slow variation of the intrinsic structure from linear anisotropy at the unspun of both end to elliptical anisotropy at the fast-spun of the middle, enables power coupling between local eigenstates, and relative power in these local eigenstates as a function of distance along the length of the fiber, the extinction ratio of the output state of polarization (SOP) as a function of distance and the normalized spin rate.



Product Features

- Low Insertion Loss
- Temperature Insensitive
- Precise Spinning Pitch
- High Current Sensitivity
- No Requirement for Quarter Wave Plate

Product Application

- Current Sensors
- Lightning Sensor
- Polarization Controller
- Polarization transformers

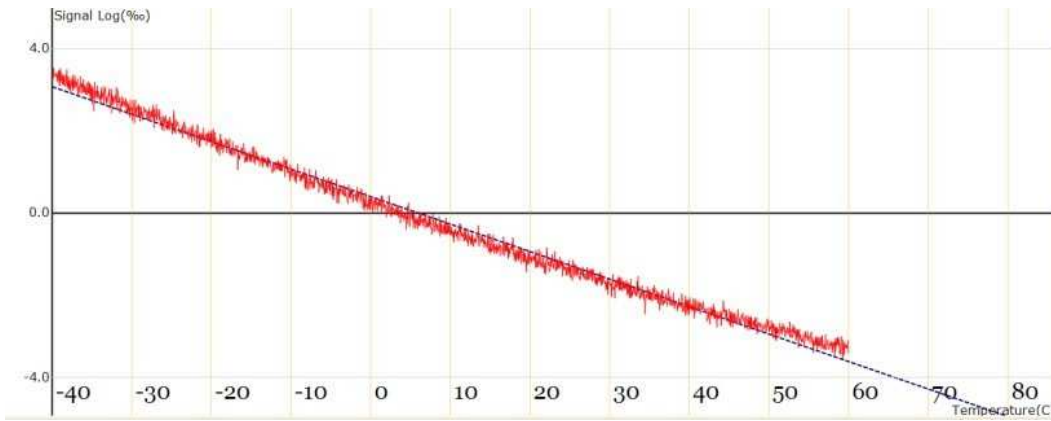
Specifications

Parameters	Unit	Performance
Operating Wavelength.	nm	1310, 1480, 1550
Bandwidth	nm	±30nm
Pitch Length at Un-Spun End	mm	∞
Pitch Length at Fast Spun End	mm	3.2
Insertion Loss	Max.	dB/meter
Insertion Loss	Typ.	dB/meter
Modal Field Diameter	Typ.	um
Bending Radii	Min.	mm
Operating Temperature	°C	-40 to +85

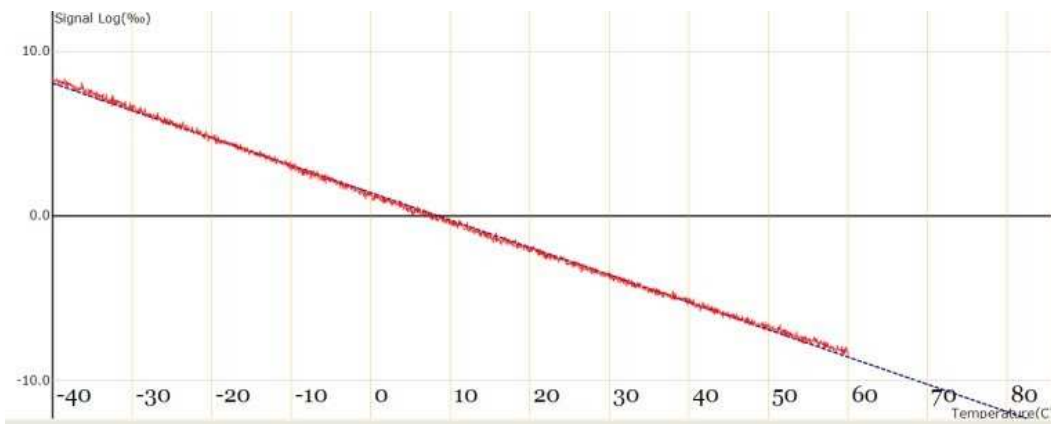
Note: 1. Central Wavelength can be customized for different applications.
2. All specifications are before connectors and are subject to change without notice.

Temperature Characteristics

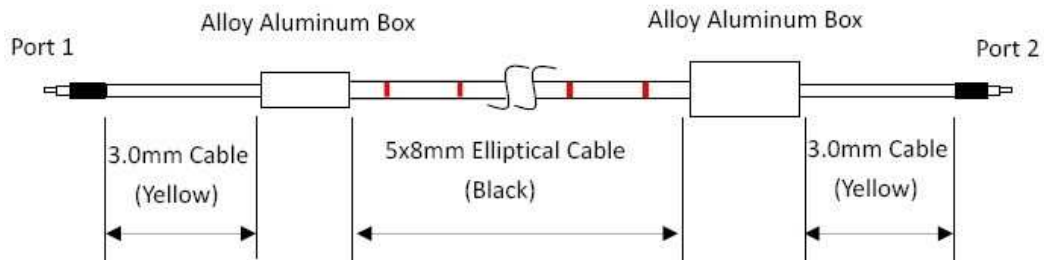
E-core Fiber



Panda Fiber



Diagram



Ordering Information

S	P	U	N	T		1	0					
					Wavelength			Fiber Type	Jacket Type	Fiber Length	Connector at Port1	Connector at Port2
					4=1550nm			P= Panda Fiber	M=0.9mm	1= 1.0 m	0=None	0=None
					5=1480nm			E= E-core Fiber	loose tube	2= 2.0 m	1=FC/PC	1=FC/PC
					7=1310nm				L=3mm cable	3= 3.0 m	2=FC/UPC	2=FC/UPC
					S=Specify					... 9= 9.0 m	3=FC/APC	3=FC/APC
										10= 10.0 m		

Note: 1. Central Wavelength can be customized for different applications.
2. All specifications are before connectors and are subject to change without notice.