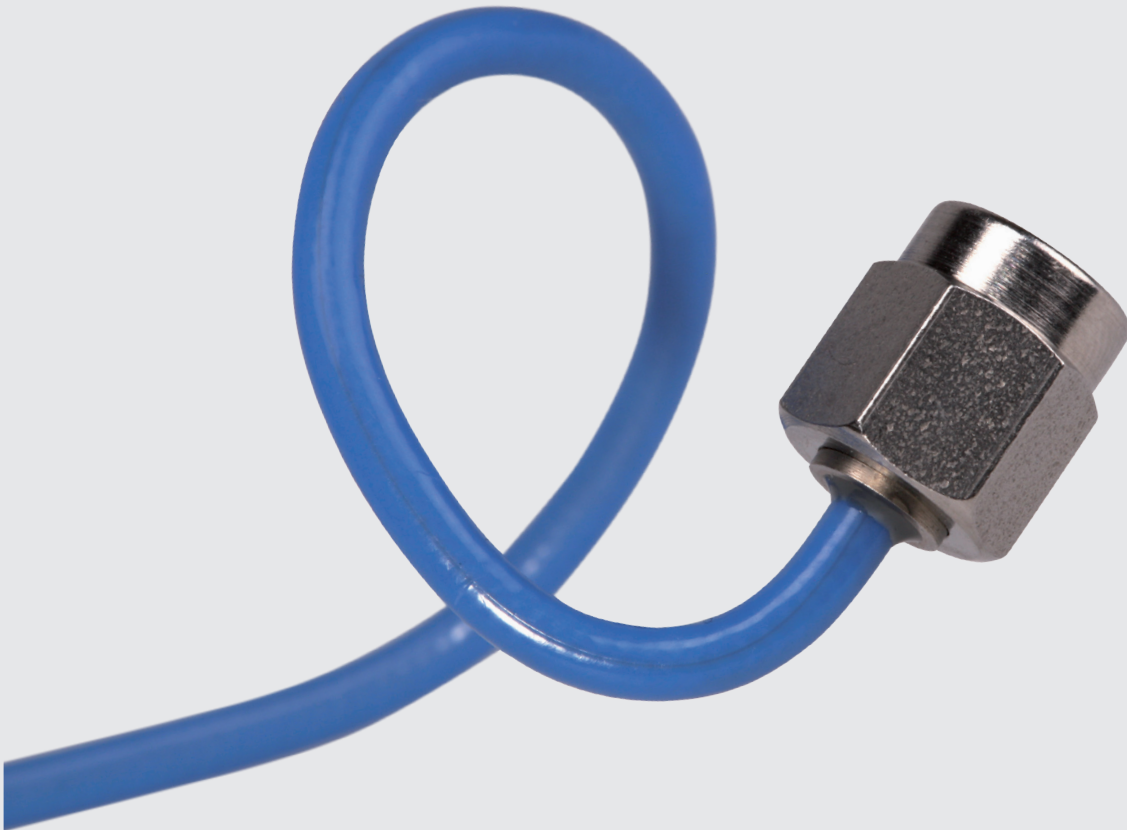


# minibend CTR

## Phase Invariant Cable Assemblies



The minibend CTR Phase Invariant cable is developed for phase critical applications requiring precision electrical length connectivity.

- Excellent phase and insertion loss stability over temperature  
< 300 ppm absolute phase change over  $-55$  to  $+125$  °C temperature range
- Outstanding phase stability versus bending  
Phase vs flexure of  $1.0^\circ$  at 24 GHz
- Revolutionary minibend™ bend-to-the-end flexibility  
5 mm minimum bend radius

# Phase Invariant Cable Assemblies

The minibend CTR family of cable assemblies combines the industry-renowned flexibility of HUBER+SUHNER Astrolab's bend-to-the-end connector termination technology with industry leading phase vs. temperature performance to create a stable, reliable, MIL-DTL-17 qualified interconnect solution to satisfy an endless range of customer applications where phase stability is key. The broad selection of connector interfaces offered on minibend CTR cable assemblies ensures that we are able to meet the unique requirements of our customers.

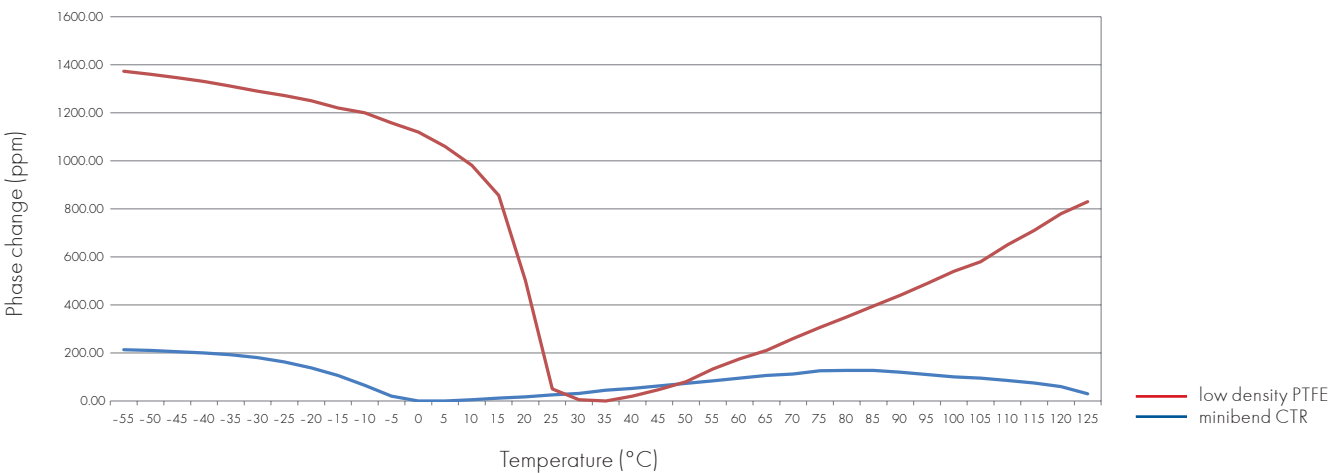
## Features

- Flat phase change over temperature
- Bend-to-the end technology
- Outstanding return loss performance

## Benefits

- Increased system accuracy over temperature change
- Higher reliability due to solderless junctions

## Phase stability versus temperature



## Phase stability versus bending

Frequency	Test one*		Test two**	
	minibend CTR	minibend	minibend CTR	minibend
24.0 GHz	1.0°	1.4°	3.7°	3.9°
1.0 GHz	0.1°	0.1°	0.1°	0.2°

\* Test one: 152 mm long assemblies were flexed 90 degrees in a 6.35 mm radius directly behind the connector.

\*\* Test two: 406 mm long assemblies were flexed 180 degrees with a 10.16 mm radius in the middle.

## Portfolio

Description	Connector 1	Connector 2	Frequency range
Minibend CTR	SMA	SMA	DC - 26 GHz
Minibend CTKR	SK	SK	DC - 40 GHz
Minibend CT2SR	SMP	SMP	DC - 40 GHz

More options on request.

HUBER+SUHNER AG  
Radio Frequency Division  
Degersheimerstrasse 14  
9100 Herisau/Switzerland  
Phone +41 71 353 4111  
hubersuhner.com

HUBER+SUHNER Astrolab  
4 Powder Horn Drive  
Warren, New Jersey  
Phone +1 732 560-3800  
Fax +1 732 560-9570  
astrolab.hubersuhner.com

HUBER+SUHNER is certified according to EN(AS) 9100, ISO 9001, ISO 14001, ISO/TS 16949 and IRIS.

### Waiver

Fact and figures herein are for information only and do not represent any warranty of any kind.