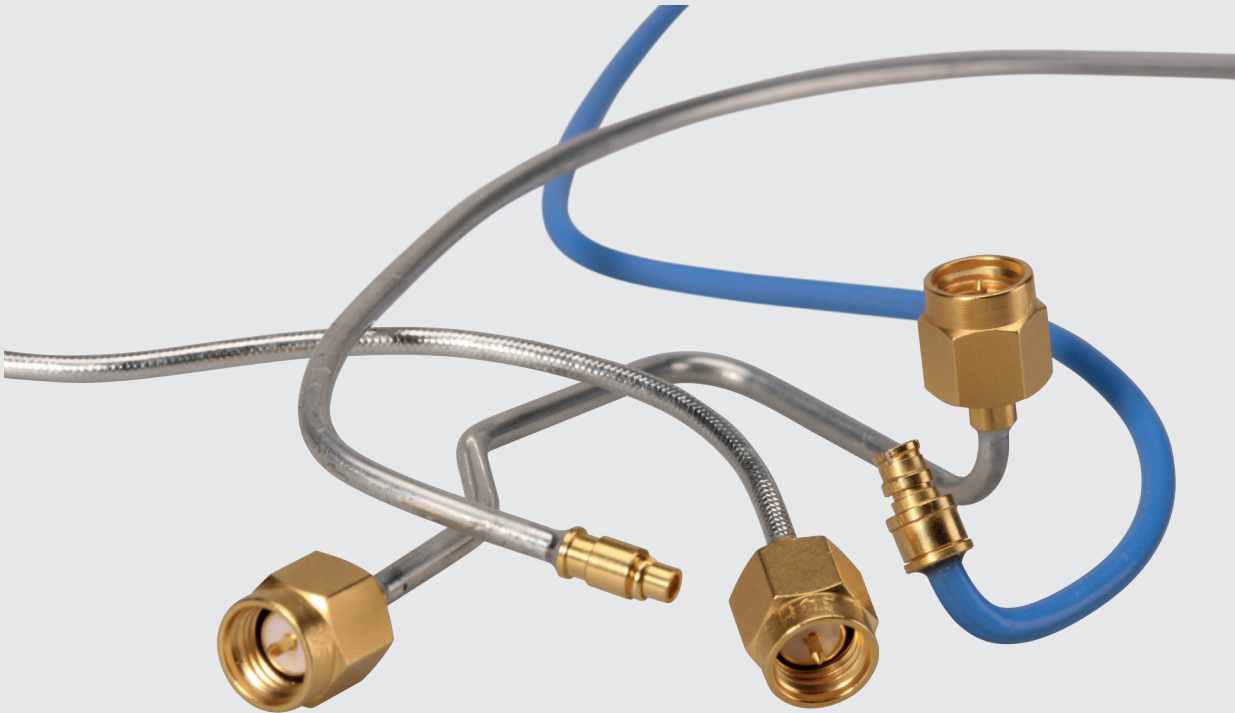


# Sucoform 86 CT

## EZ 86 CT

### Phase invariant cable assemblies



Together with the Minibend CTR, Sucoform 86 CT and EZ 86 CT (Semi Rigid) complete the offering of phase invariant cable assemblies in the diameter range of 0.086". The products are developed for phase critical applications requiring precision electrical length connectivity. Depending on the application, there is the choice of a flexible (Minibend), a hand formable (Sucoform) or a Semi Rigid (EZ) solution.

- Excellent phase and insertion loss stability over temperature vs. PTFE solutions
- Outstanding phase insertion loss and stability over different temperature cycles
- Classic form stable semi-rigid cable (EZ).
- Easy to form, strip and solder
- Conformable, hand formable and form stable cable, no need for bending tools
- Shielding effectiveness  $\geq 100$  dB (up to 18 GHz)

# Phase invariant cable assemblies

The 86 CT microwave cable family offers the choice of a flexible, hand formable or form stable assembly solution with phase and insertion loss stability factors better than the established PTFE-based products.

<b>Sucoform 86 CT</b>	Hand formable, form stable cable with tin soaked braid outer conductor
<b>EZ 86 CT</b>	Form stable cable with tubular, tin plated outer conductor
<b>Minibend 86 CTR</b>	Flexible cable assembly with bend-to-the-end connector termination

## Features

- No abrupt phase change over temperature (no PTFE knee at 19 °C/66 °F)
- Outstanding return loss and shielding effectiveness performance
- Easy installation (hand formable)
- Small bending radii

## Benefits

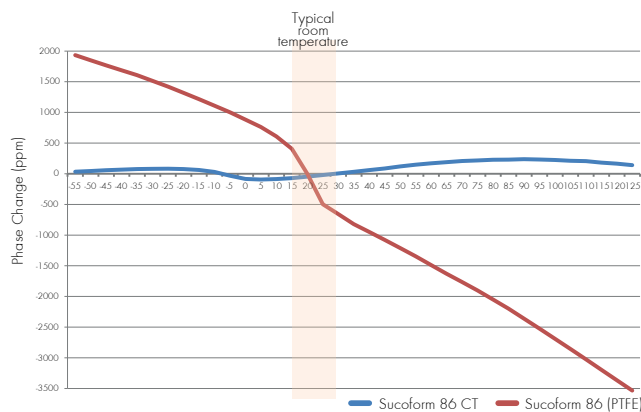
- Increased system accuracy over temperature change
- Stable system performance over multiple temperature cycles
- Product reliability - meeting the specified values not only at one single temperature
- No leaking/cross talk
- Space and time saving routing (Sucoform) and installation (EZ)

## Phase stability versus temperature

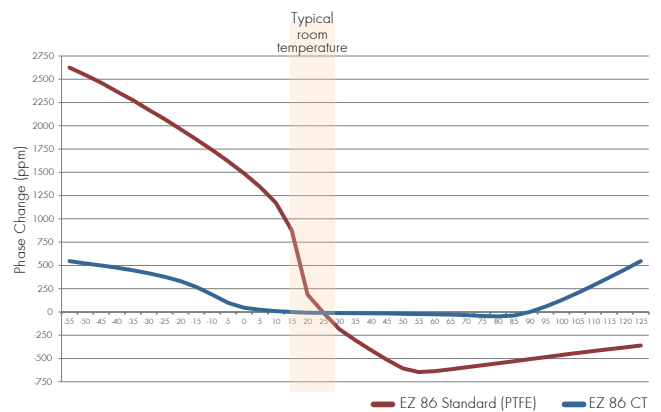
**SM 86 CT** < 400 ppm absolute phase change over -55 to +125 °C temperature range

**EZ 86 CT** < 600 ppm absolute phase change over -55 to +125 °C temperature range  
< 100 ppm absolute phase change over 0 to +90 °C temperature range

**SM 86 CT**



**EZ 86 CT**



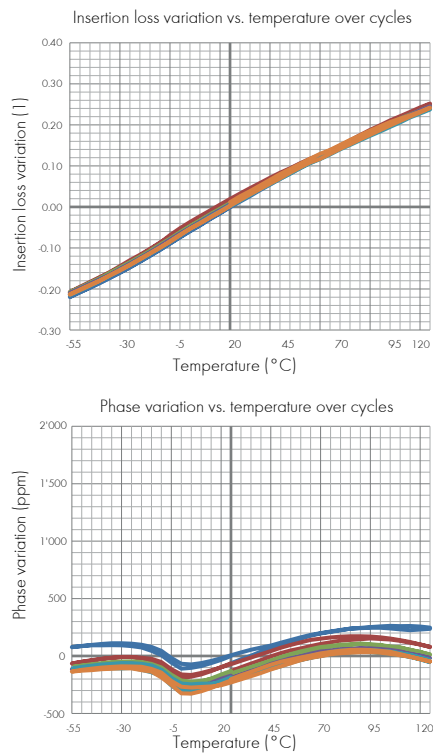
## Maximal phase and insertion stability over temperature cycles

Due to its robust outer conductor construction and ideal raw material selection, both Sucoform 86 CT as well as EZ 86 CT provide extremely solid insertion loss and phase stability values over multiple temperature cycles (full cycle windows from  $-55$  to  $+125$  °C).

Over changing temperatures, flexible outer conductor designs tend to expand/reduce together with the enlarging/contracting dielectric core and therefore changes the dimensional configuration of the cable, which leads to signal integrity variations. Sturdy construction keep the cable dimensions in place and therefore provide higher repeatability.

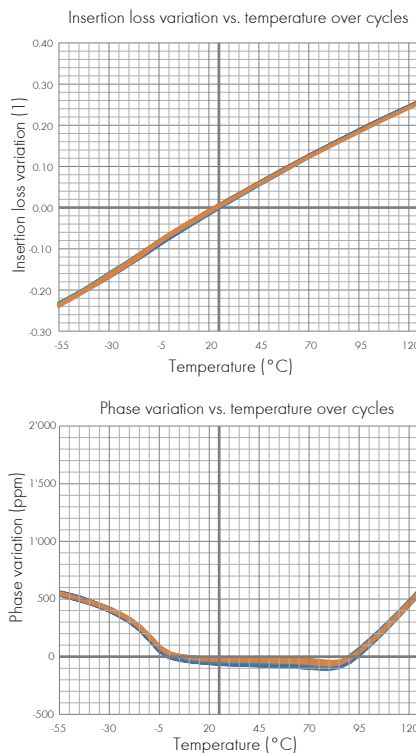
## Variation over temperature cycles

### Sucoform 86 CT

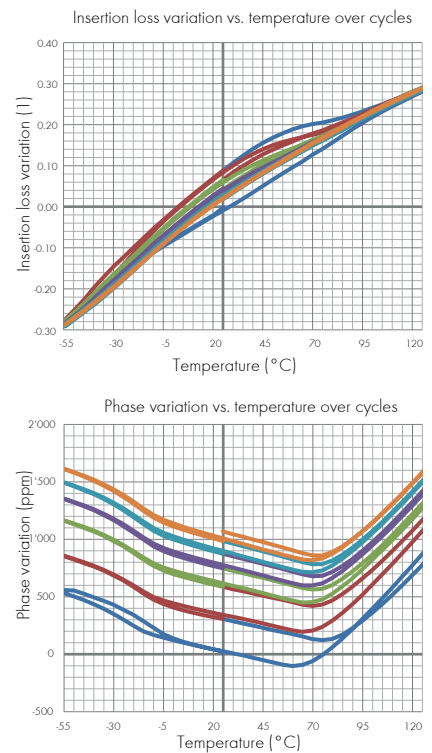


- 1st cycle
- 2nd cycle
- 3rd cycle
- 4th cycle
- 5th cycle
- 6th cycle

### EZ 86 CT



### Competition (flexible assembly)



## Connector selection

- 11\_SMA-50-2-77
- 11\_SK-50-2-64
- 11\_MMPX-50-2-4
- 16\_MMPX-50-2-3

Other interfaces or patterns on request.

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