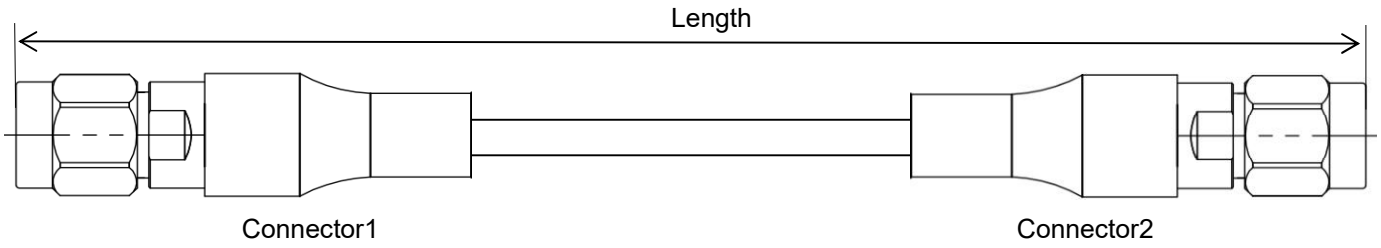
Super-flexible Phase Stable Test Cable Assembly, Using UF450

DC-40 GHz, 2.92mm Male to 2.92mm Male **UF450-292M292M-L(L:Length)**

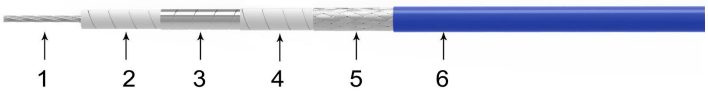


· Length can be in meter or in inch etc, e.g, UF450-292M292M-1M. Standard length tolerance: ±1.5%. Custom lengths and other connector types available.
· Length is measured from one connector end to the other connector end as shown above. For RA connectors, use the pin center-line.

Configuration

Connector 1	2.92mm male	**Connector 2**	2.92mm male
Body	Passivated stainless steel	Body	Passivated stainless steel
Center Contact	Gold plated BeCu	Center Contact	Gold plated BeCu
Cable Type	UF450		

Cable Construction



No.	Construction	Size（mm）	Materials
1	Center Conductor	0.91	Stranded silver plated copper
2	Dielectric	2.75	LD PTFE wrapping
3	Outer Conductor	2.90	Silver plated copper strip wrapping
4	Interlayer	3.20	PTFE
5	Outer Shield	3.55	Silver plated copper wire braiding
6	Inner Jacket	4.50	PUR

Electrical

Frequency	DC-40 GHz
Impedance	50 Ω
VSWR Max	1.3
IL Max(1 meter assembly)	3.7dB
*Mechanical Phase Stability	<±5°
Amplitude Stability vs Shaking	<±0.15dB

Mechanical & Environmental

Min.Bending Radius Static	20mm
Min. Bending Radius Repeated	45mm
Velocity of Propagation	76%
Temperature(Operation)	-50～85 ºC
Temperature(Storage)	-60～85 ºC

* Wrap the cable 360 degree around a mandrel whose diameter is ten times of the cable jacket size.

Bulk Cable Attenuation(Typical@25℃) **& Power**(VSWR=1.0; 40℃; Sea level)

Frequency MHz	300	1000	2000	3000	6000	8000	10000	14000	18000	26500	30000	40000
dB/100 Meter	23.3	42.9	61.3	75.6	108.6	126.4	142.4	170.6	195.6	241.9	259.1	304.5
Avg.Power kW	0.740	0.401	0.281	0.228	0.158	0.136	0.121	0.101	0.088	0.071	0.066	0.057
Attenuation at any frequency＝[1.325700×SQRT(FMHz)]+[0.000984×FMHz]												

Notes:
1) The above attenuation refers to typical loss of cable only, max loss is 1.1 times of typical loss. Insertion loss per connector is estimated as 0.03dB x SQRT Freq(GHz).
2) Power handling values are calculated based on cable properties. Power handling will vary based on connector type and actual VSWR of the cable assembly.

Typical Test Data (UF450-292M292M-1M)