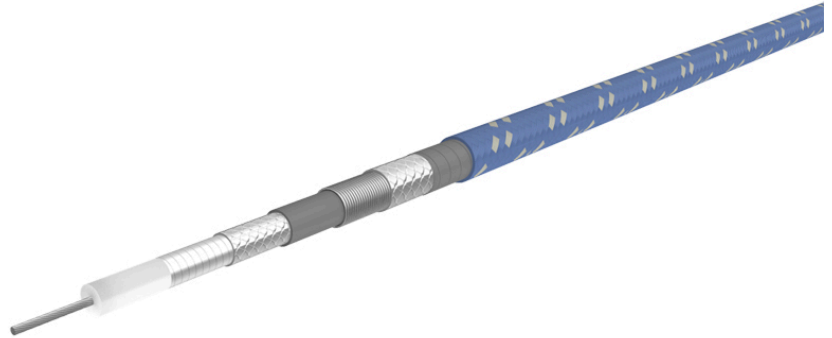


High-flexible, 50 Ohm, 40 GHz, 165°C, ø6.4 mm, PTFE jacket SUCOFLEX_540_S

Properties

- Applicable up to 40 GHz
- High phase- and amplitude stability with flexure and movement
- Excellent insertion and return loss
- Precise and repeatable measurements
- Long life time - lower measurement cost



Construction			
Component	Material	Detail	Diameter
Centre conductor	Copper, Silver plated	Strand, Low-loss	
Dielectric	PTFE (Polytetrafluoroethylene)		
Outer conductor	Copper, Silver plated	Wrapped foil, 100%	
Outer braid	Copper, Silver plated	Braid	
Jacket	FEP (Fluorinated ethylene propylene)		
Armour	Steel	Wire helix (Spiral)	
Armour	Steel	Braid	
Armour	Helically wrapped PTFE-Silicone (glued) tape	Tape	
Jacket	PTFE (Polytetrafluoroethylene)	Braid, RAL 5023 - bl	6.4mm

Electrical data	
Impedance	50 Ω
Operating frequency	≤ 40 GHz
Capacitance	87 pF
Velocity of signal propagation	77 %
Signal delay	4.3 ns/m
Screening effectiveness	90 dB at frequency 0.1 GHz ... 18GHz
Insulation resistance	100000000 MΩ*m
Operating Voltage (at sea level)	≤ 1.66 kV

Mechanical data	
Weight	approx. 90 g/m
Static bending radius	≥ 25.4 mm

High-flexible, 50 Ohm, 40 GHz, 165°C, ø6.4 mm, PTFE jacket

SUCOFLEX_540_S

Environmental data	
Operation temperature	-55 °C ... 165°C
Fire characteristics	contains halogene

Additional Information
Only available as cable assembly, not sold as bulk

Suitable connectors	
Cable group	U98

Ordering information		
Item number	Item description	Available as assembly only
85180332	SUCOFLEX_540_S	Yes

Power Matrix			
Calculation: typical Attenuation [formula: (a*f^0.5 + b*f)] and maximum Power CW [formula: (p/f^0.5)]			
a coefficient typical =	0.363	b coefficient typical =	0.009
fmax =	40.0	P at 1 GHz =	394.0
Frequency GHz	Nom. attenuation (dB/m)	Nom. attenuation Max. (dB/ft)	CW power (W)
	sea level 25°C ambient temperature	sea level 25°C ambient temperature	sea level 40°C ambient temperature
0.20	0.164	0.050	881
0.40	0.233	0.071	623
0.60	0.287	0.087	509
0.80	0.332	0.101	441
1.00	0.372	0.113	394
1.20	0.408	0.124	360
1.40	0.442	0.135	333
1.60	0.474	0.144	311
1.80	0.503	0.153	294
2.00	0.531	0.162	279
4.00	0.762	0.232	197
6.00	0.943	0.287	161
8.00	1.099	0.335	139
10.00	1.238	0.377	125
20.00	1.803	0.550	88
40.00	2.656	0.810	62

HUBER+SUHNER is certified by ISO 9001, ISO 14001, ISO 45001, IATF 16949, AS/EN 9100 and ISO/TS 22163-IRIS. Waiver: Facts and figures herein are for information only and do not represent any warranty of any kind.
DOCUMENT PIM-P30559 / Date of publication: 27.10.2023 / uncontrolled copy