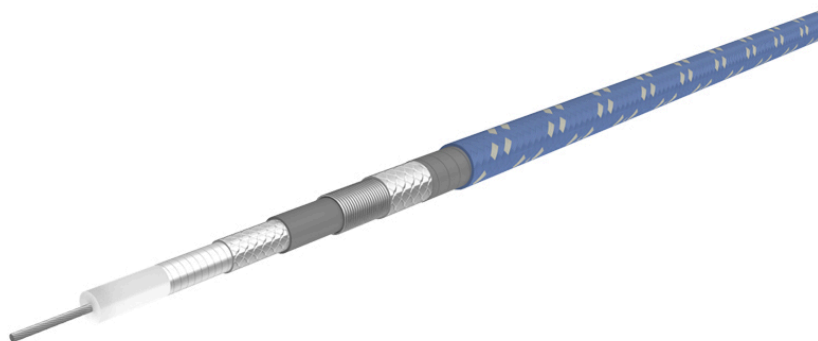


High-flexible, 50 Ohm, 50 GHz, 165°C, ø6.1 mm, PTFE jacket SUCOFLEX_550_S

Properties

- Applicable up to 50 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	6.1mm

Electrical data	
Impedance	50 Ω
Operating frequency	≤ 50 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)	≤ 1.2 kV

Mechanical data	
Weight	approx. 78 g/m
Static bending radius	≥ 25.4 mm

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SUCOFLEX_550_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
85097312	SUCOFLEX_550_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 =	0.4255	b coefficient typical =	0.01
fmax =	50.0	P at 1 GHz =	296.0
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	0.192	0.059	662
0.40	0.273	0.083	468
0.60	0.336	0.102	382
0.80	0.389	0.119	331
1.00	0.435	0.133	296
1.20	0.478	0.146	270
1.40	0.517	0.158	250
1.60	0.554	0.169	234
1.80	0.589	0.180	221
2.00	0.622	0.190	209
4.00	0.891	0.272	148
6.00	1.102	0.336	121
8.00	1.283	0.391	105
10.00	1.446	0.441	94
20.00	2.103	0.641	66
40.00	3.091	0.942	47
50.00	3.509	1.070	42

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