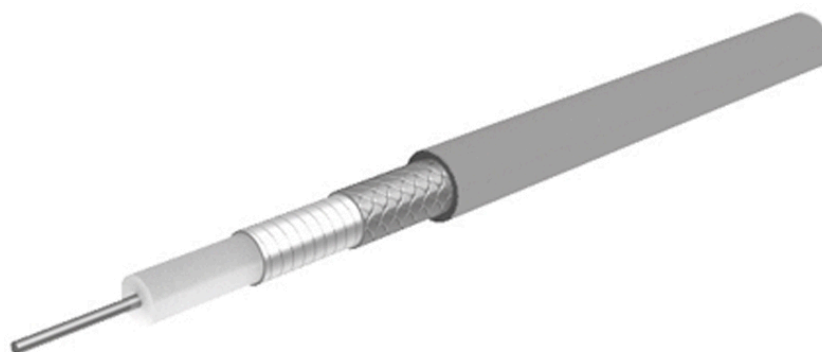


## High-flexible, 50 Ohm, 40 GHz, 165°C, Ø4.0 mm, FEP jacket

SUCOFLEX\_540

### 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)	RAL 5015 - bl	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)	≤ 1.4 kV

Mechanical data	
Weight	approx. 39 g/m
Static bending radius	≥ 12 mm
Dynamic bending radius	≥ 20 mm

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

**High-flexible, 50 Ohm, 40 GHz, 165°C, ø4.0 mm, FEP jacket**

SUCOFLEX\_540

**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
85174489	SUCOFLEX_540	Yes

**Power Matrix**Calculation: typical Attenuation [ formula:  $(a \cdot f^{0.5} + b \cdot f)$  ] and maximum Power CW [ formula:  $(p/f^{0.5})$  ]

a coefficient typical =	<b>0.363</b>	b coefficient typical =	<b>0.009</b>
fmax =	<b>40.0</b>	P at 1 GHz =	<b>394.0</b>

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

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