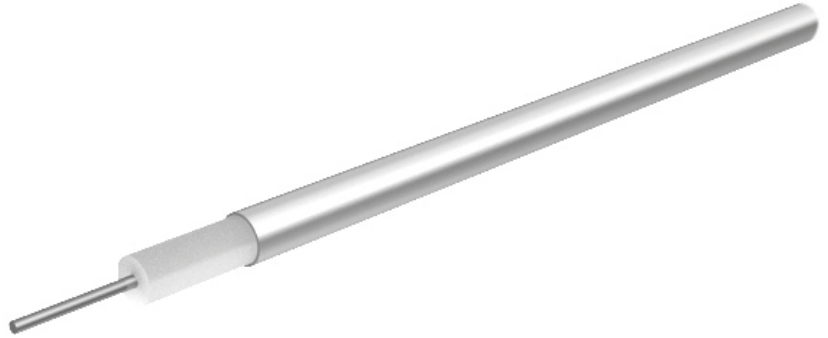


Semi-rigid, 50 Ohm, 107 GHz, 100°C, ø1.19 mm, Copper/Silver plated

SR_47_CU_SP

Properties

- Formstable cable for precise, time saving installations
- Excellent RF screening performance
- Highly efficient RF signal distribution



Construction			
Component	Material	Detail	Diameter
Centre conductor	Copper, Silver plated	Wire	0.29 mm
Dielectric	PTFE (Polytetrafluoroethylene)		0.93 mm
Outer conductor	Copper, Silver plated	Tube, 100%	1.19 mm

Electrical data	
Impedance	50 Ω +/-2.5Ω
Operating frequency	≤ 107 GHz
Capacitance	105 pF/m
Inductance	0.2 µH/m
Velocity of signal propagation	69.5 %
Signal delay	4.8 ns/m
Screening effectiveness	120 dB at frequency 0.1 GHz ... 18GHz
Insulation resistance	100000000 MΩ*m
Operating Voltage (at sea level)	≤ 1 kVrms
Test voltage (50 Hz/1 min)	≤ 2 kVrms

Mechanical data	
Weight	approx. 7.1 g/m
Static bending radius	≥ 3.18 mm

Environmental data	
Operation temperature	-55 °C ... 100 °C
Installation temperature	-20 °C ... 60 °C
Fire characteristics	contains halogene

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Material compliance			
Item number	Directive / Regulation	Rating	Exemptions / Details
22810503	RoHS 2011/65/EU and (EU) 2015/863	Compliant without exemption	
	REACH 1907/2006 Article 33 SVHC	Compliant	
22820503	RoHS 2011/65/EU and (EU) 2015/863	Compliant without exemption	
	REACH 1907/2006 Article 33 SVHC	Compliant	
22830503	RoHS 2011/65/EU and (EU) 2015/863	Compliant without exemption	
	REACH 1907/2006 Article 33 SVHC	Compliant	

Suitable connectors	
Cable group	Y15

Ordering information		
Item number	Item description	Available as assembly only
22810503	SR_47_CU_SP_COIL	No
22820503	SR_47_CU_SP_2M	No
22830503	SR_47_CU_SP_3M	No

Power Matrix			
Calculation: typical Attenuation [formula: (a*f^0.5 + b*f)] and maximum Power CW [formula: (p/f^0.5)]			
a coefficient typical =	1.04044	b coefficient typical =	0.03967
fmax =	107.0	P at 1 GHz =	32.0
Frequency GHz	Nom. attenuation (dB/m)	Nom. attenuation (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	0.473	0.144	72
0.40	0.674	0.205	51
0.60	0.830	0.253	41
0.80	0.962	0.293	36
1.00	1.080	0.329	32
1.20	1.187	0.362	29
1.40	1.287	0.392	27
1.60	1.380	0.421	25
1.80	1.467	0.447	24
2.00	1.551	0.473	23
4.00	2.240	0.683	16
6.00	2.787	0.849	13
8.00	3.260	0.994	11
10.00	3.687	1.124	10
20.00	5.446	1.660	7
40.00	8.167	2.489	5
60.00	10.439	3.182	4
80.00	12.480	3.804	4
100.00	14.371	4.380	3
107.00	15.007	4.574	3

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