

Coaxial Cable SUCOFLEX_101

Description

SUCOFLEX_100, the flexible, high performance microwave cable



Technical Data

Construction

	Material	Detail	Diameter
Centre conductor	Copper, Silver plated	Wire	
Dielectric	PTFE-LD		
Outer conductor	Copper, Silver plated	wrapped Foil, 100%	
Outer conductor	Copper, Silver plated	Braid	
Jacket	FEP (Fluorinated ethylene propylene)	RAL 5000 - bl	3.65 mm

Electrical Data

Impedance	50 Ω
Operating Frequency	50 GHz
Capacitance	87 pF/m
Velocity of signal propagation	77 %
Signal delay	4.3 ns/m
Insulation resistance	$\geq 1 \times 10^8$ MQm
Min. screening effectiveness	≥ 90 dB (up to 18 GHz)
Max. operating voltage	≤ 1.2 kV _{rms} (at sea level)

Mechanical Data

Weight	3.56 kg/100 m
Min. bending radius	static 11 mm
	dynamic 20 mm

Environmental Data

Temperature range	-55 °C... +165 °C
2011/95/EC (RoHS)	compliant

Additional Information

Ordering Information

Order as	SUCOFLEX_101 (available only as assembly)
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Remarks

(For details refer to the HUBER+SUHNER MICROWAVE CABLES AND ASSEMBLIES GENERAL CATALOGUE or contact your nearest HUBER+SUHNER partner)

Suitable Connectors

Cable group	U98 SUCOFLEX
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Matrix typical Attenuation [formula: $(a \cdot f^{0.5} + b \cdot f)$] and maximum Power CW [formula: $(p/f^{0.5})$]

Coefficients:

a = 0.4255

b = 0.01

f_{max} = 50

P at 1GHz = 296

Frequency (GHz)	Nom. attenuation (dB / m) sea level 25° C ambient temperature	Nom. attenuation (dB / ft) sea level 25° C ambient temperature	Max. CW power (watt) sea level 40° C ambient temperature
2.5	0.7	0.213	187
5.0	1.0	0.305	132
7.5	1.24	0.378	108
10.0	1.45	0.441	94
12.5	1.63	0.497	84
15.0	1.8	0.548	76
17.5	1.95	0.596	71
20.0	2.1	0.641	66
22.5	2.24	0.684	62
25.0	2.38	0.725	59
27.5	2.51	0.764	56
30.0	2.63	0.802	54
32.5	2.75	0.838	52
35.0	2.87	0.874	50
37.5	2.98	0.908	48
40.0	3.09	0.942	47
42.5	3.2	0.975	45
45.0	3.3	1.007	44
47.5	3.41	1.039	43
50.0	3.51	1.069	42