

Coaxial Cable SUCOTEST_18A

Description

SUCOTEST_18A, the flexible, high performance microwave cable

Technical Data

Construction

	Material	Detail	Diameter
Centre conductor	Copper, Silver plated	Strand-19	
Dielectric	PTFE (Polytetrafluoroethylene)		
Outer conductor	Copper, Silver plated	wrapped Foil, 100%	
Outer conductor	Copper, Tin plated	Braid	
Jacket	FEP (Fluorinated ethylene propylene)	RAL 5013 - bl	5.6 mm
Armor	Stainless Steel	Braid, %	
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Jacket	PUR (Polyurethane)	RAL 5013 - bl	10.2 mm +/-

Electrical Data

Impedance	50 Ω
Operating Frequency	18 GHz
Capacitance	87 pF/m
Velocity of signal propagation	77 %
Signal delay	4.3 ns/m
Insulation resistance	≥ 1 x 10 ⁹ MΩm
Min. screening effectiveness	≥ 90 dB (up to 18 GHz)
Max. operating voltage	≤ 2.4 kV _{rms} (at sea level)
Test voltage	4.8 kV _{rms} (50 Hz/1 min)

Mechanical Data

Weight	dynamic	16.82 kg/100 m 50 mm
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Environmental Data

Temperature range	-55 °C... +85 °C
Flammability	MIL-T-87104 § 4.6.4.8, ,
2011/95/EC (RoHS)	compliant

Additional Information

Ordering Information

Order as SUCOTEST_18A (available only as assembly)

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 = 0.293

b = 0.0175

$f_{max} = 18$

P at 1GHz = 525

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
0.9	0.29	0.090	553
1.8	0.42	0.129	391
2.7	0.53	0.161	320
3.6	0.62	0.189	277
4.5	0.7	0.213	247
5.4	0.78	0.236	226
6.3	0.85	0.258	209
7.2	0.91	0.278	196
8.1	0.98	0.297	184
9.0	1.04	0.316	175
9.9	1.1	0.334	167
10.8	1.15	0.351	160
11.7	1.21	0.368	153
12.6	1.26	0.384	148
13.5	1.31	0.400	143
14.4	1.36	0.416	138
15.3	1.41	0.431	134
16.2	1.46	0.446	130
17.1	1.51	0.460	127
18.0	1.56	0.475	124