

Coaxial Cable RG_196_A/U

Description

PTFE - 50 Ohm - single screen



Technical Data

Construction

	Material	Detail	Diameter
Centre conductor	Steel, Copper+Silver plated	Strand-07	0.31 mm
Dielectric	PTFE (Polytetrafluoroethylene)		0.83 mm
Outer conductor	Copper, Silver plated	Braid, 96%	1.33 mm
Jacket	PFA (Perfluoroalkoxy)	RAL 9010 - wh	1.83 mm +/- 0.1

Print: HUBER+SUHNER RG 196 A/U 50 Ohm (PA no.)

Electrical Data

Impedance	50 Ω +/- 2
Operating Frequency	1 GHz
Capacitance	97 pF/m
Velocity of signal propagation	69 %
Signal delay	4.84 ns/m
Insulation resistance	≥ 1 x 10 ⁸ MQm
Min. screening effectiveness	≥ 42 dB (up to 1 GHz)
Max. operating voltage	≤ 0.5 kV _{rms} (at sea level)
Test voltage	1 kV _{rms} (50 Hz/1 min)

Mechanical Data

Weight	0.92 kg/100 m
Min. bending radius	static 10 mm
	repeated (for ≤ 50 bendings) 18 mm
	dynamic 27 mm

Environmental Data

Temperature range	-80 °C... +205 °C
Installation temperature	-20 °C... +60 °C
Flammability	IEC 60332-3, ,
2011/95/EC (RoHS)	compliant

Additional Information

Ordering Information

Order as RG_196_A/U

Remarks

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

Suitable Connectors

Cable group U1 1 mm / 50 Ohm

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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 = 1.4135

b = 0.2038

$f_{max} = 1$

P at 1GHz = 108

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
0.05	0.33	0.099	483
0.1	0.47	0.142	342
0.15	0.58	0.176	279
0.2	0.67	0.205	241
0.25	0.76	0.231	216
0.3	0.84	0.255	197
0.35	0.91	0.277	183
0.4	0.98	0.297	171
0.45	1.04	0.317	161
0.5	1.1	0.336	153
0.55	1.16	0.354	146
0.6	1.22	0.371	139
0.65	1.27	0.388	134
0.7	1.33	0.404	129
0.75	1.38	0.420	125
0.8	1.43	0.435	121
0.85	1.48	0.450	117
0.9	1.52	0.465	114
0.95	1.57	0.479	111
1.0	1.62	0.493	108