

Flexible RF cable

RG_196_A/U Item: 22510049

Description

RG: RG type RF cables

RG196, 50 Ohm, 1 GHz, 205°C, ø1.83 mm, PFA jacket



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 (production order number)

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
Screening effectiveness	≥ 42 dB (up to 1 GHz)
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
		18 mm
	dynamic	27 mm

Environmental Data

Temperature range	-80 °C ... +205 °C
Installation temperature	-20 °C... +60 °C
Flame propagation test	IEC 60332-3,
Halogen free	No
2011/65/EU (RoHS - including 2015/863 and 2017/2102)	compliant
1907/2006/EC (REACH)	compliant

Additional Information

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	Nom. attenuation	Nom. attenuation	Max. CW power
(GHz)	(dB / m)	(dB / ft)	(W)
	sea level 25° C ambient temperature	sea level 25° C ambient temperature	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