

Flexible RF cable

RG_400_/U Item: 22510080

Description

RG: RG type RF cables

RG400, 50 Ohm, 6 GHz, 200°C, ø4.95 mm, FEP jacket



Technical Data

Construction

	Material	Detail	Diameter
Centre conductor	Copper, Silver plated	Strand-19	1 mm
Dielectric	PTFE (Polytetrafluoroethylene)		2.95 mm
Outer conductor	Copper, Silver plated	Braid, 97%	3.6 mm
Outer conductor	Copper, Silver plated	Braid, 94 %	4.2 mm
Jacket	FEP (Fluorinated ethylene propylene)	RAL 8015 - br	4.95 mm +/- 0.1

Print: HUBER+SUHNER RG 400 U 50 Ohm (production order number)

Electrical Data

Impedance	50 Ω +/- 2
Operating Frequency	6 GHz
Capacitance	94 pF/m
Velocity of signal propagation	69 %
Signal delay	4.75 ns/m
Screening effectiveness	≥ 81 dB (up to 6 GHz)
Operating voltage	≤ 1.7 kV _{rms} (at sea level)
Test voltage	3.4 kV _{rms} (50 Hz/1 min)

Mechanical Data

Weight	6.4 kg/100 m
Min. bending radius	static
	30 mm
	50 mm
	dynamic
	75 mm

Environmental Data

Temperature range	-65 °C ... +200 °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

MIL reference: M17/128-RG400

Remarks

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

Suitable Connectors

Cable group	U11 3 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 = 0.3894

b = 0.0925

f_{max} = 6

P at 1GHz = 365

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 (W) sea level 40° C ambient temperature
0,3	0,24	0,073	666
0,6	0,36	0,109	471
0,9	0,45	0,138	385
1,2	0,54	0,164	333
1,5	0,62	0,188	298
1,8	0,69	0,210	272
2,1	0,76	0,231	252
2,4	0,83	0,252	236
2,7	0,89	0,271	222
3,0	0,95	0,290	211
3,3	1,01	0,309	201
3,6	1,07	0,327	192
3,9	1,13	0,344	185
4,2	1,19	0,362	178
4,5	1,24	0,379	172
4,8	1,3	0,395	167
5,1	1,35	0,412	162
5,4	1,4	0,428	157
5,7	1,46	0,444	153
6,0	1,51	0,460	149