

Flexible RF cable

RG_303_/U Item: 22510078

Description

RG: RG type RF cables

RG303, 50 Ohm, 1 GHz, 200°C, ø4.3 mm, FEP jacket



Technical Data

Construction

	Material	Detail	Diameter
Centre conductor	Steel, Copper+Silver plated	Wire	0.95 mm
Dielectric	PTFE (Polytetrafluoroethylene)		2.95 mm
Outer conductor	Copper, Silver plated	Braid, 97%	3.6 mm
Jacket	FEP (Fluorinated ethylene propylene)	RAL 8015 - br	4.3 mm +/- 0.1

Print: HUBER+SUHNER RG 303 U 50 Ohm (production order number)

Electrical Data

Impedance	50 Ω +/- 2
Operating Frequency	1 GHz
Capacitance	94 pF/m
Velocity of signal propagation	69 %
Signal delay	4.75 ns/m
Screening effectiveness	≥ 40 dB (up to 3 GHz)
Operating voltage	≤ 2.5 kV _{rms} (at sea level)
Test voltage	5 kV _{rms} (50 Hz/1 min)

Mechanical Data

Weight	4.48 kg/100 m
Min. bending radius	static 25 mm 43 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: M17/111-RG303

Remarks

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

Suitable Connectors

Cable group	U7 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 = 0.3956

b = 0.0645

f_{max} = 1

P at 1GHz = 338

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	0,09	0,028	1512
0,1	0,13	0,040	1069
0,15	0,16	0,050	873
0,2	0,19	0,058	756
0,25	0,21	0,065	676
0,3	0,24	0,072	617
0,35	0,26	0,078	571
0,4	0,28	0,084	534
0,45	0,29	0,090	504
0,5	0,31	0,095	478
0,55	0,33	0,100	456
0,6	0,35	0,105	436
0,65	0,36	0,110	419
0,7	0,38	0,115	404
0,75	0,39	0,119	390
0,8	0,41	0,124	378
0,85	0,42	0,128	367
0,9	0,43	0,132	356
0,95	0,45	0,136	347
1,0	0,46	0,140	338