

HUBER+SUHNER® DATA SHEET

Coaxial Cable: RG_174_A/U

Rev.: I



Description

PE-50 Ohm - single screen

Technical Data

Construction

	Material	Detail	Diameter
Centre conductor	Steel, Copper plated	Strand-07	0.48 mm
Dielectric	PE		1.48 mm
Outer conductor	Copper, Tin plated	Braid, 87 %	2 mm
Jacket	PVC II (low migration)	RAL 9005 - bk	2.8 mm +/- 0.12
Print	HUBER+SUHNER RG 174 A/U 50 Ohm (PA no.)		

Electrical Data

Impedance	50 Ω +/- 2
Max. operating frequency	1 GHz
Capacitance	101 pF/m
Velocity of signal propagation	66 %
Signal delay	5.03 ns/m
Insulation resistance	$\geq 1 \times 10^8$ M Ω m
Min. screening effectiveness	>40 dB (up to 1 GHz)
Max. operating voltage	1.5 kV _{rms} (at sea level)
Test voltage	3 kV _{rms} (50 Hz/1 min)

Mechanical Data

Weight	1.2 kg/100 m	
Min. bending radius	static	15 mm
	repeated (for max. 50 bendings)	28 mm
	dynamic	55 mm

Environmental Data

Temperature range	-25 °C... + 85 °C
Installation temperature	-20 °C... + 60 °C
2002/95/EC (RoHS)	compliant

Ordering Information

Order as RG_174_A/U

Additional Information

Remarks

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

Cable group U2 2 mm / 50 Ohm

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Matrix **Attenuation** [formula: $(a \cdot f^{0.5} + b \cdot f)$] **and Power CW** [formula: $(p \cdot f^{0.5})$]

Coefficients:

a=	0.9889	b=	0.1368	f _{max} =	1	p _{at} 1GHz =	37
	Frequency		Nom. attenuation		Nom. attenuation		Max. CW power
	(GHz)		(dB / m)		(dB / ft)		(watt)
			sea level 25° C ambient temperature		sea level 25° C ambient temperature		sea level 40° C ambient temperature
	0.05		0.23		0.070		165
	0.10		0.33		0.101		117
	0.15		0.40		0.122		96
	0.20		0.47		0.143		83
	0.25		0.53		0.162		74
	0.30		0.58		0.177		68
	0.35		0.63		0.192		63
	0.40		0.68		0.207		59
	0.45		0.72		0.219		55
	0.50		0.77		0.235		52
	0.55		0.81		0.247		50
	0.60		0.85		0.259		48
	0.65		0.89		0.271		46
	0.70		0.92		0.280		44
	0.75		0.96		0.293		43
	0.80		0.99		0.302		41
	0.85		1.03		0.314		40
	0.90		1.06		0.323		39
	0.95		1.09		0.332		38
	1.00		1.13		0.344		37

HUBER+SUHNER is certified according to ISO 9001 and ISO 14001

WAIVER!

It is exclusively in written agreements that we provide our customers with warrants and representations as to the technical specifications and/or the fitness for any particular purpose. The facts and figures contained herein are carefully compiled to the best of our knowledge, but they are intended for general informational purposes only.



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