

HUBER+SUHNER® DATA SHEET

Coaxial Cable: RG_174_/U



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 (non migration)	RAL 9005 - bk	2.55 mm +/- 0.13
Print	HUBER+SUHNER RG 174 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	1.12	kg/100 m
Min. bending radius	static	15 mm
	repeated (for max. 50 bendings)	26 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_/U

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	crimped (U2)
	clamped (U2)
	soldered —

HUBER+SUHNER® DATA SHEET

Coaxial Cable: RG_174_/U

Rev.: G



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

Coefficients:

a=	0.7879	b=	0.1255	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		0.18		0.055		165
	0.10		0.26		0.079		117
	0.15		0.32		0.098		96
	0.20		0.38		0.116		83
	0.25		0.43		0.131		74
	0.30		0.47		0.143		68
	0.35		0.51		0.155		63
	0.40		0.55		0.168		59
	0.45		0.59		0.180		55
	0.50		0.62		0.189		52
	0.55		0.65		0.198		50
	0.60		0.69		0.210		48
	0.65		0.72		0.219		46
	0.70		0.75		0.229		44
	0.75		0.78		0.238		43
	0.80		0.81		0.247		41
	0.85		0.83		0.253		40
	0.90		0.86		0.262		39
	0.95		0.89		0.271		38
	1.00		0.91		0.277		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.



HUBER+SUHNER AG
RF Industrial
9100 Herisau, Switzerland
 Phone +41 (0)71 353 41 11
 Fax +41 (0)71 353 45 90
 www.hubersuhner.com

HUBER+SUHNER – Excellence in Connectivity Solutions