

HUBER+SUHNER® DATA SHEET

Coaxial Cable: RG_142_B/U

Description

Double screened coaxial cable



Technical Data

Construction

	Material	Detail	Diameter
Centre conductor	Steel, Copper+Silver plated	Wire	0.95 mm
Dielectric	PTFE (Polytetrafluorethyl.)		2.95 mm
Outer conductor	Copper, Silver plated	Braid, 97 %	3.6 mm
Outer conductor	Copper, Silver plated	Braid, 94 %	4.25 mm
Jacket	FEP (Fluorethylene Prop.)	RAL 8015 - br	4.95 mm +/- 0.1
Print	HUBER+SUHNER RG 142 B/U 50 Ohm (PA no.)		

Electrical Data

Impedance	50	Ω +/- 2
Max. operating frequency	6	GHz
Capacitance	95	pF/m
Velocity of signal propagation	70	%
Signal delay	4.75	ns/m
Insulation resistance	$\geq 1 \times 10^8$	M Ω m
Min. screening effectiveness	>85	dB (up to 6 GHz)
Max. operating voltage	2.5	kV _{rms} (at sea level)
Test voltage	5	kV _{rms} (50 Hz/1 min)

Mechanical Data

Weight	6.4	kg/100 m
Min. bending radius	static	30 mm
	repeated (for max. 50 bendings)	50 mm

Environmental Data

Temperature range	-65 °C... + 165 °C
Installation temperature	-20 °C... + 60 °C
Flammability	IEC 60332-3

Ordering Information

Order as	RG_142_B/U
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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	U9 / U10
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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=	0.3969	b=	0.0676	f _{max} =	6	p _{at} 1GHz =	407
	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
	0.3		0.24		0.073		743
	0.6		0.35		0.107		525
	0.9		0.44		0.134		429
	1.2		0.52		0.158		372
	1.5		0.59		0.180		332
	1.8		0.65		0.198		303
	2.1		0.72		0.219		281
	2.4		0.78		0.238		263
	2.7		0.83		0.253		248
	3.0		0.89		0.271		235
	3.3		0.94		0.286		224
	3.6		1.00		0.305		215
	3.9		1.05		0.320		206
	4.2		1.10		0.335		199
	4.5		1.15		0.351		192
	4.8		1.19		0.363		186
	5.1		1.24		0.378		180
	5.4		1.29		0.393		175
	5.7		1.33		0.405		170
	6.0		1.38		0.421		166

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

WAIVER!

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