

HUBER+SUHNER® DATA SHEET

Coaxial Cable: RG_142_B/U

Rev.: I



Description

PTFE - 50 Ohm - double screen

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
Outer conductor	Copper, Silver plated	Braid, 94 %	4.25 mm
Jacket	FEP (Fluorinated ethylene propylene)		RAL 8015 - br4.95 mm +/-
Print	0.1 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	69	%
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	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
	repeated (for max. 50 bendings)	50 mm

Environmental Data

Temperature range	-20 °C... + 60 °C	-65 °C... + 165 °C
Installation temperature	-20 °C... + 60 °C	
Flammability	IEC 60332-3	
2002/95/EC (RoHS)	compliant	

Ordering Information

Order as RG_142_B/U

Additional Information

Remarks

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

Cable group U9 3 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=	0.3956	b=	0.0645	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		0.43		0.131		429
	1.2		0.51		0.155		372
	1.5		0.58		0.177		332
	1.8		0.65		0.198		303
	2.1		0.71		0.216		281
	2.4		0.77		0.235		263
	2.7		0.82		0.250		248
	3.0		0.88		0.268		235
	3.3		0.93		0.283		224
	3.6		0.98		0.299		215
	3.9		1.03		0.314		206
	4.2		1.08		0.329		199
	4.5		1.13		0.344		192
	4.8		1.18		0.360		186
	5.1		1.22		0.372		180
	5.4		1.27		0.387		175
	5.7		1.31		0.399		170
	6.0		1.36		0.415		166

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

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