



SUHNER® COAXIAL CABLE DATA SHEET

TYPE RG_142_B/U

Double screened coaxial cable

Cable Design



	Material	Detail	Diameter
Centre conductor:	Steel: Copper+Silver Plated Wire		0.95 mm
Dielectric:	PTFE (Polytetrafluorethyln.)		2.95 mm
1. Outer conductor:	Copper: Silver Plated Braid	97%	3.6 mm
2. 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
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/ 1min)
Insulation resistance:	> 1	$\times 10^6$ M Ω /m

General Data

Temperature range:	-65 °C... +165 °C
Weight:	6.4 kg / 100 m
Min. bending radius :	static 30 mm
	repeated (for max. 50 bendings) 50 mm

Suitable Connectors

Cable group **U9 / U10**
 (for details refer to the "SUHNER coaxial connector catalogue" or contact your nearest HUBER+SUHNER partner)

Notes

WAIVER!

While the information contained in this folder has been carefully compiled to the best of our present knowledge, it is not intended as representation or warranty of any kind on our part regarding the fitness of the products concerned for any particular use or purpose and neither shall any statement contained herein be construed as a recommendation to infringe any industrial property rights or as a license to use any such rights. The fitness of each product for any particular purpose must be checked beforehand with our specialists.



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Matrix Attenuation [formula : (a*f^0.5 +b*f)] and Power CW [formula : (p*/ f^0.5)]

Coefficients:

a= 0.3969

b= 0.0676

f_{max}= 6

p_{at 1GHz} = 407

Frequency (GHz)	Nom. attenuation (dB / m) sea level 25° C ambient temperature	Nom. attenuation (dB / ft) sea level 25° C ambient temperature	Max. CW power (watt) sea level 40° C ambient temperature
0.30	0.238	0.0725	743.1
0.60	0.348	0.1061	525.4
0.90	0.437	0.1332	429.0
1.20	0.516	0.1573	371.5
1.50	0.588	0.1792	332.3
1.80	0.654	0.1993	303.4
2.10	0.717	0.2185	280.9
2.40	0.777	0.2368	262.7
2.70	0.835	0.2545	247.7
3.00	0.890	0.2713	235.0
3.30	0.944	0.2877	224.0
3.60	0.996	0.3036	214.5
3.90	1.047	0.3191	206.1
4.20	1.097	0.3343	198.6
4.50	1.146	0.3493	191.9
4.80	1.194	0.3639	185.8
5.10	1.241	0.3782	180.2
5.40	1.287	0.3923	175.1
5.70	1.333	0.4063	170.5
6.00	1.378	0.4200	166.2

Test (following tests have been passed successfully)

Flame propagation: IEC 60332-3

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