



SUHNER® COAXIAL CABLE DATA SHEET

TYPE RG 316 /U

Single screened coaxial cable

Cable Design



	Material	Detail	Diameter
Centre conductor:	StCuAg	Strand-07 (0.18 mm)	0.54 mm
Dielectric:	PTFE		1.55 mm
1. Outer conductor:	CuAg Braid	94% coverage	2 mm
2. Outer conductor:	n/a n/a		
Jacket:	FEP	RAL 8015 - br	2.5 mm +/-0.1
Print:	SUHNER SWITZERLAND RG 316 /U 50 Ohm		

Electrical Data

Impedance:	50 Ω +/-2
Max. operating frequency:	1 GHz
Capacitance :	97.2 pF / m
Velocity of signal propagation:	69 %
Signal delay:	4.86 ns / m
Min. screening effectiveness:	> 35 dB (up to 1 GHz)
Max. operating voltage:	0.85 kV _{rms} (at sea level)
Test voltage:	2 kV _{rms} (50 Hz/ 1min)
Insulation resistance:	> 10 M Ω m

General Data

Temperature range:	-65 °C...+ 165 °C
Weight:	1.6 kg / 100 m
Min. bending radius :	static 15 mm
	repeated (for max. 50 bendings) 25 mm
	dynamic 50 mm

Suitable Connectors

Cable group *U2 / U2*
(for details refer to the "SUHNER coaxial connector catalogue" or contact you nearest HUBER+SUHNER partner)

Notes

Order as **RG 316 /U** under article number **22510079**

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 constructed 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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Page 1



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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:

$a = 0.767$

$b = 0.0892$

$f_{\max} = 1$

$p_{\text{at } 1\text{GHz}} = 135$

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
0.05	0.176	0.0536	603.7
0.10	0.251	0.0765	426.9
0.15	0.310	0.0945	348.6
0.20	0.361	0.1100	301.9
0.25	0.406	0.1237	270.0
0.30	0.447	0.1362	246.5
0.35	0.485	0.1478	228.2
0.40	0.521	0.1588	213.5
0.45	0.555	0.1692	201.2
0.50	0.587	0.1789	190.9
0.55	0.618	0.1884	182.0
0.60	0.648	0.1975	174.3
0.65	0.676	0.2060	167.4
0.70	0.704	0.2146	161.4
0.75	0.731	0.2228	155.9
0.80	0.757	0.2307	150.9
0.85	0.783	0.2386	146.4
0.90	0.808	0.2463	142.3
0.95	0.832	0.2536	138.5
1.00	0.856	0.2609	135.0

Test (following tests have been passed successfully)

Flame propagation: IEC 332-3

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Page 2