



# SUHNER® COAXIAL CABLE DATA SHEET

## TYPE RG\_141A/U-03

*Single screened coaxial cable*

### Cable Design



	<b>Material</b>	<b>Detail</b>	<b>Diameter</b>	
Centre conductor:	Steel: Copper+Silver Plated Wire		0.95 mm	
Dielectric:	PTFE (Polytetrafluorethyln.)		2.95 mm	
1. Outer conductor:	Copper: Silver Plated Braid	96%	3.6 mm	
Barrier:	PTFE (Polytetrafluorethyln.)	Tape (h)	3.9 mm	
Jacket:	Aramid	RAL 8015 - br	4.4 mm	
<i>Armour E:</i>	<i>AramidBraid</i>	<i>81%</i>	<i>4.4 mm</i>	<i>+/- 0.15</i>

### Electrical Data

Impedance:	50	$\Omega$ +/-2
Max. operating frequency:	1	GHz
Capacitance :	95	pF / m
Velocity of signal propagation:	70	%
Signal delay:	4.75	ns / m
Min. screening effectiveness:	> 41	dB (up to 1 GHz)
Max. operating voltage:	1.7	kV <sub>rms</sub> (at sea level)
Test voltage:	3	kV <sub>rms</sub> (50 Hz/ 1min)
Insulation resistance:	> 1	$\times 10^6$ M $\Omega$ /m

### General Data

Temperature range:	-65 °C... +165 °C
Weight:	4.5 kg / 100 m
Min. bending radius :	static 25 mm
	repeated (for max. 50 bendings) 45 mm

### Suitable Connectors

Cable group *U7 / U7*  
 (for details refer to the "SUHNER coaxial connector catalogue" or contact your nearest HUBER+SUHNER partner)

### Notes

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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= 0.3894

b= 0.0829

f<sub>max</sub>= 1

p<sub>at 1GHz</sub> = 490

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	0.091	0.0277	2'191.3
0.10	0.131	0.0399	1'549.5
0.15	0.163	0.0497	1'265.2
0.20	0.191	0.0582	1'095.7
0.25	0.215	0.0655	980.0
0.30	0.238	0.0725	894.6
0.35	0.259	0.0789	828.3
0.40	0.279	0.0850	774.8
0.45	0.299	0.0911	730.4
0.50	0.317	0.0966	693.0
0.55	0.334	0.1018	660.7
0.60	0.351	0.1070	632.6
0.65	0.368	0.1122	607.8
0.70	0.384	0.1170	585.7
0.75	0.399	0.1216	565.8
0.80	0.415	0.1265	547.8
0.85	0.429	0.1308	531.5
0.90	0.444	0.1353	516.5
0.95	0.458	0.1396	502.7
1.00	0.472	0.1439	490.0

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