



# SUHNER® COAXIAL CABLE DATA SHEET

## TYPE RG 223 /U-04

*Double screened coaxial cable*

### Cable Design



	Material	Detail	Diameter
Centre conductor:	CuAg	Wire ( 0.88 mm)	0.88 mm
Dielectric:	PE		2.95 mm
1. Outer conductor:	CuAg Braid	96% coverage	3.6 mm
2. Outer conductor:	CuAg Braid	94% coverage	4.2 mm
3. Outer conductor:	n/a n/a		
Jacket:	PVC2	RAL 7035 - gr	5.4 mm +/-0.15
Print:	SUHNER SWITZERLAND RG 223 /U-04 50 Ohm		
Screen:	n/a n/a		
Armour E:	n/a		
Armour F:	n/a		
Armour G:	n/a		
Armour H:	n/a		
Jacket:	n/a		mm

### Electrical Data

Impedance:	50 $\Omega$ +/-2
Max. operating frequency:	5 GHz
Capacitance :	100.7 pF / m
Velocity of signal propagation:	66 %
Signal delay:	5.03 ns / m
Min. screening effectiveness:	> 85 dB (up to 0.3 GHz)
Max. operating voltage:	2.5 kV <sub>rms</sub> (at sea level)
Test voltage:	5 kV <sub>rms</sub> (50 Hz/ 1min)
Insulation resistance:	> 10 M $\Omega$ m

### General Data

Temperature range:	-40 °C...+ 85 °C
Weight:	5.5 kg / 100 m
Min. bending radius :	static 30 mm
	repeated (for max. 50 bendings) 55 mm

### Suitable Connectors

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

### Notes

Order as **RG 223 /U-04** under article number **22510074**

#### 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.



**HUBER+SUHNER**

HUBER+SUHNER AG  
Interconnect Division  
CH-9100 Herisau  
Phone +41 (0)71 353 41 11  
Fax +41 (0)71 353 45 90  
<http://www.hubersuhner.com>

Issued: 13.6.2002 14:27

Document: TEMP\_PDB\_2251007  
4.PDF

RF\_Co\_Ca\_PDF

uncontrolled copy

Page 1



# SUHNER® COAXIAL CABLE DATA SHEET

## TYPE RG 223 /U-04

**Matrix**      **Attenuation** [formula :  $(a \cdot f^{0.5} + b \cdot f)$ ] and **Power CW** [formula :  $(p \cdot f^{0.5})$ ]

Coefficients:

$a = 0.4056$

$b = 0.0789$

$f_{\max} = 5$

$p_{\text{at } 1\text{GHz}} = 120$

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
0.25	0.223	0.0680	240.0
0.50	0.326	0.0994	169.7
0.75	0.410	0.1250	138.6
1.00	0.485	0.1478	120.0
1.25	0.552	0.1682	107.3
1.50	0.615	0.1874	98.0
1.75	0.675	0.2057	90.7
2.00	0.731	0.2228	84.9
2.25	0.786	0.2396	80.0
2.50	0.839	0.2557	75.9
2.75	0.890	0.2713	72.4
3.00	0.939	0.2862	69.3
3.25	0.988	0.3011	66.6
3.50	1.035	0.3155	64.1
3.75	1.081	0.3295	62.0
4.00	1.127	0.3435	60.0
4.25	1.171	0.3569	58.2
4.50	1.215	0.3703	56.6
4.75	1.259	0.3837	55.1
5.00	1.301	0.3965	53.7

**Test** (following tests have been passed successfully)

Flame propagation: n/a      n/a      n/a

Halogen content: n/a

Smoke: n/a

Radiation: n/a

Stress: n/a

Aging: n/a

Ozone: n/a

Crack: n/a

Toxicity: n/a

Abrasion: n/a

### 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.



**HUBER+SUHNER**

HUBER+SUHNER AG  
Interconnect Division  
CH-9100 Herisau  
Phone +41 (0)71 353 41 11  
Fax +41 (0)71 353 45 90  
<http://www.hubersuhner.com>

Issued: 13.6.2002 14:27

Document: TEMP\_PDB\_2251007  
4.PDF

RF\_Co\_Ca\_PDF

uncontrolled copy

Page 2