

# HUBER+SUHNER® DATA SHEET

## Coaxial Cable: RG\_223\_/U



### Description

PE-50 Ohm - double screen

### Technical Data

#### Construction

	Material	Detail	Diameter
Centre conductor	Copper, Silver plated	Wire	0.88 mm
Dielectric	PE		2.95 mm
Outer conductor	Copper, Silver plated	Braid, 96 %	3.6 mm
Outer conductor	Copper, Silver plated	Braid, 94 %	4.2 mm
Jacket	PVC II (low migration)	RAL 9005 - bk	5.4 mm +/- 0.1
Print	HUBER+SUHNER RG 223 U 50 Ohm (PA no.)		

#### Electrical Data

Impedance	50 $\Omega$ +/- 2
Max. operating frequency	6 GHz
Capacitance	101 pF/m
Velocity of signal propagation	66 %
Signal delay	5.03 ns/m
Insulation resistance	$\geq 1 \times 10^8$ M $\Omega$ m
Min. screening effectiveness	>85 dB (up to 1 GHz)
Max. operating voltage	2.5 kV <sub>rms</sub> (at sea level)
Test voltage	5 kV <sub>rms</sub> (50 Hz/1 min)

#### Mechanical Data

Weight	5.5 kg/100 m
Min. bending radius	static 30 mm
	repeated (for max. 50 bendings) 54 mm

#### Environmental Data

Temperature range	-25 °C... + 85 °C
Installation temperature	-20 °C... + 60 °C
2002/95/EC (RoHS)	compliant

#### Ordering Information

Order as RG\_223\_/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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Rev.: K

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

Coefficients:

a=	0.3756	b=	0.0749	f <sub>max.</sub> =	6	p <sub>at</sub> 1GHz =	120
	<b>Frequency</b>		<b>Nom. attenuation</b>		<b>Nom. attenuation</b>		<b>Max. CW power</b>
	<b>(GHz)</b>		<b>(dB / m)</b>		<b>(dB / ft)</b>		<b>(watt)</b>
			sea level 25° C ambient temperature		sea level 25° C ambient temperature		sea level 40° C ambient temperature
	0.3		0.23		0.070		219
	0.6		0.34		0.104		155
	0.9		0.42		0.128		126
	1.2		0.50		0.152		110
	1.5		0.57		0.174		98
	1.8		0.64		0.195		89
	2.1		0.70		0.213		83
	2.4		0.76		0.232		77
	2.7		0.82		0.250		73
	3.0		0.88		0.268		69
	3.3		0.93		0.283		66
	3.6		0.98		0.299		63
	3.9		1.03		0.314		61
	4.2		1.08		0.329		59
	4.5		1.13		0.344		57
	4.8		1.18		0.360		55
	5.1		1.23		0.375		53
	5.4		1.28		0.390		52
	5.7		1.32		0.402		50
	6.0		1.37		0.418		49

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

**WAIVER!**

It is exclusively in written agreements that we provide our customers with warrants and representations as to the technical specifications and/or the fitness for any particular purpose. The facts and figures contained herein are carefully compiled to the best of our knowledge, but they are intended for general informational purposes only.



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