



# SUHNER® COAXIAL CABLE DATA SHEET

## TYPE S 02123-01

*Single screened coaxial cable*

### Cable Design



	<b>Material</b>	<b>Detail</b>	<b>Diameter</b>
Centre conductor:	<i>Cu</i>	<i>Wire ( 0.54 mm)</i>	<i>0.54 mm</i>
Dielectric:	<i>SPE</i>		<i>2.4 mm</i>
1. Outer conductor:	<i>Cu Braid</i>	<i>93% coverage</i>	<i>2.9 mm</i>
Jacket:	<i>PVC</i> <i>(no print)</i>	<i>RAL 8091 - rd</i>	<i>3.5 mm +/-0.1</i>

### Electrical Data

Impedance:	<i>75 Ω +/-6</i>
Max. operating frequency:	<i>1 GHz</i>
Capacitance :	<i>54.4 pF / m</i>
Velocity of signal propagation:	<i>82 %</i>
Signal delay:	<i>4.08 ns / m</i>
Min. screening effectiveness:	<i>&gt; 40 dB (up to 1 GHz)</i>
Max. operating voltage:	<i>0.35 kV<sub>rms</sub> (at sea level)</i>
Test voltage:	<i>1 kV<sub>rms</sub> (50 Hz/ 1min)</i>
Insulation resistance:	<i>&gt; 10 MΩm</i>

### General Data

Temperature range:	<i>-40 °C...+ 85 °C</i>
Weight:	<i>1.8 kg / 100 m</i>
<i>Min. bending radius :</i>	<i>static</i> <i>20 mm</i>
	<i>repeated (for max. 50 bendings)</i> <i>35 mm</i>
	<i>dynamic</i> <i>60 mm</i>

### Suitable Connectors

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

### Notes

Order as **S 02123-01** under article number **22511454**

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

Coefficients:

a= 0.3563

b= 0.1997

f<sub>max</sub>= 1

p<sub>at 1GHz</sub> = 77

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	0.090	0.0274	344.4
0.10	0.133	0.0405	243.5
0.15	0.168	0.0512	198.8
0.20	0.199	0.0607	172.2
0.25	0.228	0.0695	154.0
0.30	0.255	0.0777	140.6
0.35	0.281	0.0856	130.2
0.40	0.305	0.0930	121.7
0.45	0.329	0.1003	114.8
0.50	0.352	0.1073	108.9
0.55	0.374	0.1140	103.8
0.60	0.396	0.1207	99.4
0.65	0.417	0.1271	95.5
0.70	0.438	0.1335	92.0
0.75	0.458	0.1396	88.9
0.80	0.478	0.1457	86.1
0.85	0.498	0.1518	83.5
0.90	0.518	0.1579	81.2
0.95	0.537	0.1637	79.0
1.00	0.556	0.1695	77.0

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