



# SUHNER® COAXIAL CABLE DATA SHEET

## TYPE RG\_393\_U

**Double screened coaxial cable**

### Cable Design

	<b>Material</b>	<b>Detail</b>	<b>Diameter</b>	
Centre conductor:	Copper: Silver Plated	Strand-07	2.46 mm	
Dielectric:	PFA (Polyfluoralkoxyalkane)		7.25 mm	
1. Outer conductor:	Copper: Silver Plated Braid	92%	8 mm	
2. Outer conductor:	Copper: Silver Plated Braid	94%	8.75 mm	
Jacket:	FEP (Fluorethylene Prop.)	RAL 8015 - br	9.9 mm	+/- 0.25
Print:	HUBER+SUHNER RG 393 U 50 Ohm (PA no.)			

### Electrical Data

Impedance:	50	$\Omega$ +/-2
Max. operating frequency:	6	GHz
Capacitance :	95.9	pF / m
Velocity of signal propagation:	70	%
Signal delay:	4.79	ns / m
Min. screening effectiveness:	> 81	dB (up to 6 GHz)
Max. operating voltage:	4.1	kV <sub>rms</sub> (at sea level)
Test voltage:	8.2	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:	22.9 kg / 100 m	
Min. bending radius :	static	60 mm
	repeated (for max. 50 bendings)	100 mm

### Suitable Connectors

Cable group **U33**  
(for details refer to the "SUHNER coaxial connector catalogue" or contact your nearest HUBER+SUHNER partner)

### Notes

#### 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 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= 0.19

b= 0.067

f<sub>max</sub>= 6

p<sub>at 1GHz</sub> = 1461

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
0.30	0.124	0.0378	2'667.4
0.60	0.187	0.0570	1'886.1
0.90	0.241	0.0735	1'540.0
1.20	0.289	0.0881	1'333.7
1.50	0.333	0.1015	1'192.9
1.80	0.376	0.1146	1'089.0
2.10	0.416	0.1268	1'008.2
2.40	0.455	0.1387	943.1
2.70	0.493	0.1503	889.1
3.00	0.530	0.1615	843.5
3.30	0.566	0.1725	804.3
3.60	0.602	0.1835	770.0
3.90	0.637	0.1941	739.8
4.20	0.671	0.2045	712.9
4.50	0.705	0.2149	688.7
4.80	0.738	0.2249	666.9
5.10	0.771	0.2350	646.9
5.40	0.803	0.2447	628.7
5.70	0.836	0.2548	611.9
6.00	0.867	0.2642	596.5

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

Flame propagation: IEC 60332-3

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