

HUBER+SUHNER® DATA SHEET

Coaxial Cable: RG_58_C/U-01



Description

PE-50 Ohm - single screen - precision type

Technical Data

Construction

	Material	Detail	Diameter
Centre conductor	Copper, Tin plated	Strand-19	0.9 mm
Dielectric	PE (Polyethylene)		2.95 mm
Outer conductor	Copper, Tin plated	Braid, 96 %	3.6 mm
Jacket	PVC II (low migration)	RAL 9005 - bk	4.95 mm +/- 0.15
Print	HUBER+SUHNER RG 58 C/U-01 50 Ohm (PA no.)		

Electrical Data

Impedance	50 Ω +/- 1
Max. operating frequency	1 GHz
Capacitance	101 pF/m
Velocity of signal propagation	66 %
Signal delay	5.03 ns/m
Insulation resistance	$\geq 1 \times 10^8 \text{ M}\Omega\text{m}$
Min. screening effectiveness	> 38 dB (up to 1 GHz)
Max. operating voltage	2.5 kV _{rms} (at sea level)
Test voltage	5 kV _{rms} (50 Hz/1 min)

Mechanical Data

Weight	3.7 kg/100 m
Min. bending radius	static 25 mm
	repeated (for max. 50 bendings) 50 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_58_C/U-01

Additional Information

Remarks

(For details refer to the HUBER+SUHNER RF CABLES GENERAL CATALOGUE or contact your nearest HUBER+SUHNER partner)

Cable group U7 3 mm / 50 Ohm

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

Coefficients:

a=	0.4617	b=	0.2295	f _{max} =	1	p _{at} 1GHz =	105
	Frequency		Nom. attenuation		Nom. attenuation		Max. CW power
	(GHz)		(dB / m)		(dB / ft)		(watt)
			sea level 25° C ambient temperature		sea level 25° C ambient temperature		sea level 40° C ambient temperature
	0.05		0.11		0.034		470
	0.10		0.17		0.052		332
	0.15		0.21		0.064		271
	0.20		0.25		0.076		235
	0.25		0.29		0.088		210
	0.30		0.32		0.098		192
	0.35		0.35		0.107		177
	0.40		0.38		0.116		166
	0.45		0.41		0.125		157
	0.50		0.44		0.134		148
	0.55		0.47		0.143		142
	0.60		0.50		0.152		136
	0.65		0.52		0.158		130
	0.70		0.55		0.168		125
	0.75		0.57		0.174		121
	0.80		0.60		0.183		117
	0.85		0.62		0.189		114
	0.90		0.64		0.195		111
	0.95		0.67		0.204		108
	1.00		0.69		0.210		105

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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