

HUBER+SUHNER® DATA SHEET

Coaxial Cable: RG_303_/U



Description

PTFE - 50 Ohm - single screen

Technical Data

Construction

	Material	Detail	Diameter
Centre conductor	Steel, Copper+Silver plated	Wire	0.95 mm
Dielectric	PTFE		2.95 mm
Outer conductor	Copper, Silver plated	Braid, 97 %	3.6 mm
Jacket	FEP	RAL 8015 - br	4.3 mm +/- 0.1
Print	HUBER+SUHNER RG 303 U 50 Ohm (PA no.)		

Electrical Data

Impedance	50	Ω +/- 2
Max. operating frequency	1	GHz
Capacitance	94	pF/m
Velocity of signal propagation	69	%
Signal delay	4.75	ns/m
Insulation resistance	$\geq 1 \times$	$10^8 \text{ M}\Omega\text{m}$
Min. screening effectiveness	>40	dB (up to 3 GHz)
Max. operating voltage	1.7	kV _{rms} (at sea level)
Test voltage	3.4	kV _{rms} (50 Hz/1 min)

Mechanical Data

Weight	4.48	kg/100 m
Min. bending radius	static	25 mm
	repeated (for max. 50 bendings)	43 mm

Environmental Data

Temperature range	-20 °C... + 60 °C	-65 °C... + 165 °C
Installation temperature	-20 °C... + 60 °C	
Flammability	IEC 60332-3	
2002/95/EC (RoHS)	compliant	

Ordering Information

Order as RG_303_/U

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=	0.3956	b=	0.0645	f _{max} =	1	p _{at} 1GHz =	338
	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		0.09		0.027		1512
	0.10		0.13		0.040		1069
	0.15		0.16		0.049		873
	0.20		0.19		0.058		756
	0.25		0.21		0.064		676
	0.30		0.24		0.073		617
	0.35		0.26		0.079		571
	0.40		0.28		0.085		534
	0.45		0.29		0.088		504
	0.50		0.31		0.094		478
	0.55		0.33		0.101		456
	0.60		0.35		0.107		436
	0.65		0.36		0.110		419
	0.70		0.38		0.116		404
	0.75		0.39		0.119		390
	0.80		0.41		0.125		378
	0.85		0.42		0.128		367
	0.90		0.43		0.131		356
	0.95		0.45		0.137		347
	1.00		0.46		0.140		338

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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