

Coaxial Cable RG_178_B/U

Description

PTFE - 50 Ohm - single screen



Technical Data

Construction

	Material	Detail	Diameter
Centre conductor	Steel, Copper+Silver plated	Strand-07	0.31 mm
Dielectric	PTFE (Polytetrafluoroethylene)		0.83 mm
Outer conductor	Copper, Silver plated	Braid, 95%	1.33 mm
Jacket	FEP (Fluorinated ethylene propylene)	RAL 8015 - br	1.8 mm +/- 0.1

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Armor	N/A	, %
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Electrical Data

Impedance	50 Ω +/- 2
Operating Frequency	3 GHz
Capacitance	97 pF/m
Velocity of signal propagation	69 %
Signal delay	4.84 ns/m
Insulation resistance	≥ 1 x 10 ⁸ MΩm
Min. screening effectiveness	≥ 40 dB (up to 1 GHz)
Max. operating voltage	≤ 0.5 kV _{rms} (at sea level)
Test voltage	1 kV _{rms} (50 Hz/1 min)

Mechanical Data

Weight	0.84 kg/100 m
Min. bending radius	static 10 mm repeated (for ≤ bendings) 18 mm dynamic 27 mm

Environmental Data

Temperature range	-65 °C... +165 °C
Installation temperature	-20 °C... +60 °C
Flammability	IEC 60332-3, ,
2011/65/EU (RoHS)	compliant

Additional Information

Ordering Information

Order as RG_178_B/U

Remarks

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

Suitable Connectors

Cable group U1 1 mm / 50 Ohm

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

Coefficients:

a = 1.4135

b = 0.2038

f_{max} = 3

P at 1GHz = 59

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
0.15	0.58	0.176	152
0.3	0.84	0.255	108
0.45	1.04	0.317	88
0.6	1.22	0.371	76
0.75	1.38	0.420	68
0.9	1.52	0.465	62
1.05	1.66	0.507	58
1.2	1.79	0.546	54
1.35	1.92	0.584	51
1.5	2.04	0.621	48
1.65	2.15	0.656	46
1.8	2.26	0.690	44
1.95	2.37	0.723	42
2.1	2.48	0.755	41
2.25	2.58	0.786	39
2.4	2.68	0.816	38
2.55	2.78	0.846	37
2.7	2.87	0.876	36
2.85	2.97	0.904	35
3.0	3.06	0.933	34