

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 ≤ 50 bendings) 18 mm
	dynamic 27 mm

Environmental Data

Temperature range	-65 °C... +165 °C
Installation temperature	-20 °C... +60 °C
Flammability	IEC 60332-3, ,
2011/95/EC (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 = 1.414

b = 0.173

$f_{max} = 3$

P at 1GHz = 52

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	0.57	0.175	134
0.3	0.83	0.252	95
0.45	1.03	0.313	78
0.6	1.2	0.365	67
0.75	1.35	0.413	60
0.9	1.5	0.456	55
1.05	1.63	0.497	51
1.2	1.76	0.535	47
1.35	1.88	0.572	45
1.5	1.99	0.607	42
1.65	2.1	0.641	40
1.8	2.21	0.673	39
1.95	2.31	0.705	37
2.1	2.41	0.735	36
2.25	2.51	0.765	35
2.4	2.61	0.794	34
2.55	2.7	0.823	33
2.7	2.79	0.851	32
2.85	2.88	0.878	31
3.0	2.97	0.905	30