Data Sheet

Coaxial Cable
RG_214_/U

Description

PE-50 Ohm - double screen - presicion type

Technical Data

Construction

	Material	Detail	Diameter
Centre conductor	Copper, Silver plated	Strand-07	2.25 mm
Dielectric	PE (Polyethylene)		7.28 mm
Outer conductor	Copper, Silver plated	Braid, 90.7%	8 mm
Outer conductor	Copper, Silver plated	Braid, 93.9 %	8.7 mm
Jacket	PVC II (low migration)	RAL 9005 - bk	10.8 mm +/- 0.15

Print: HUBER+SUHNER RG 214 U 50 Ohm (PA no.)

Electrical Data

Impedance		50 Ω +/- 1
Operating Frequency		6 GHz
Capacitance		101 pF/m
Velocity of signal propagation		66 %
Signal delay		5 ns/m
Insulation resistance		≥ 1 x 10^8 MΩm
Min. screening effectiveness		≥ 71 dB (up to 1 GHz)
Max. operating voltage		≤ 5 kV_{rms} (at sea level)
Test voltage		10 kV_{rms} (50 Hz/1 min)
Phase vs Temperature	-40°C... + 70°C	
Phase vs Bending		9 °/GHz

Mechanical Data

Weight		18.5 kg/100 m
Min. bending radius	static	55 mm
	repeated (for ≤ 50 bendings)	108 mm

Environmental Data

Temperature range	-25 °C... +85 °C
Installation temperature	-20 °C... +60 °C
2011/95/EC (RoHS)	compliant

Additional Information

Ordering Information

Order as	RG_214_/U

Remarks

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

Suitable Connectors

Cable group	U32 7 mm / 50 Ohm

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Matrix typical Attenuation [formula: (a*f^0.5 + b*f)] and maximum Power CW [formula: (p/f^0.5)]
Coefficients:

a = 0.202	b = 0.063	f_{max} = 6	P at 1GHz = 325

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
0,3	0,13	0,039	593
0,6	0,19	0,059	420
0,9	0,25	0,076	343
1,2	0,3	0,090	297
1,5	0,34	0,104	265
1,8	0,38	0,117	242
2,1	0,43	0,130	224
2,4	0,46	0,141	210
2,7	0,5	0,153	198
3,0	0,54	0,164	188
3,3	0,57	0,175	179
3,6	0,61	0,186	171
3,9	0,64	0,196	165
4,2	0,68	0,207	159
4,5	0,71	0,217	153
4,8	0,74	0,227	148
5,1	0,78	0,237	144
5,4	0,81	0,247	140
5,7	0,84	0,256	136
6,0	0,87	0,266	133