

RG213 LSFH, 50 Ohm, 2 GHz, 105°C, ø10.6 mm, RADOX® jacket

RADOX_RF_213

Properties

- Halogen free alternative to RG_213
- Low smoke
- Ozone, UV and weathering resistance
- Railway qualified
- HUBER+SUHNER RADOX® jacket material



Construction			
Component	Material	Detail	Diameter
Centre conductor	Copper	Strand-07	2.25 mm
Dielectric	PEX (Polyethylene cross-linked)		7.25 mm
Outer conductor	Copper, Silver plated	Braid, 95%	8.09 mm
Jacket	RADOX EM104	RAL 9005 - bk	10.6 mm +/- 0.1 mm

Electrical data	
Impedance	50 Ω +/- 2Ω
Operating frequency	≤ 2 GHz
Capacitance	101 pF/m
Velocity of signal propagation	66 %
Signal delay	5.03 ns/m
Screening effectiveness	41 dB at frequency 0.001 GHz ... 2GHz
Insulation resistance	10000000 MΩ*m
Operating Voltage (at sea level)	≤ 5 kVrms
Test voltage (50 Hz/1 min)	≤ 10 kVrms

Mechanical data	
Weight	approx. 168 g/m
Static bending radius	≥ 50 mm
Repeated bending radius	100 mm (bendings, up to 50)
Dynamic bending radius	< 150 mm

Environmental data	
Operation temperature	-40 °C ... 105 °C
Installation temperature	-20 °C ... 60 °C
Flame propagation standard	EN 60332-1-2 IEC 60332-3-25

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Fire characteristics	free of halogenes, acc. standard IEC 60754
Smoke test	EN 61034-2
UV resistance	ISO 4892-2A

Additional Information
EN 45545 compliant Hazard level for indoor cables: HL2 An operating temperature of -55°C is feasible for static applications.

Suitable connectors	
Cable group	U42

Ordering information		
Item number	Item description	Available as assembly only
85023730	RADOX_RF_213	No

Power Matrix			
Calculation: typical Attenuation [formula: $(a \cdot f^{0.5} + b \cdot f)$] and maximum Power CW [formula: $(p/f^{0.5})$]			
a coefficient typical =	0.191	b coefficient typical =	0.0689
fmax =	2	P at 1 GHz =	560
Frequency GHz	Nom. attenuation (dB/m)	Nom. attenuation (dB/ft)	CW power (W)
	sea level 25°C ambient temperature	sea level 25°C ambient temperature	sea level 40°C ambient temperature
0.10	0.067	0.021	1771
0.20	0.099	0.030	1252
0.30	0.125	0.038	1022
0.40	0.148	0.045	885
0.60	0.189	0.058	723
0.80	0.226	0.069	626
1.00	0.260	0.079	560
1.20	0.292	0.089	511
1.40	0.322	0.098	473
1.60	0.352	0.107	443
1.80	0.380	0.116	417
2.00	0.408	0.124	396

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