

RG214 LSFH, 50 Ohm, 6 GHz, 105°C, ø11.1 mm, RADOX® jacket

RADOX_RF_214

Properties

- Halogen free alternative to RG_214
- Low smoke
- Ozone, UV and weathering resistance
- Railway qualified
- HUBER+SUHNER RADOX® jacket material



Construction			
Component	Material	Detail	Diameter
Centre conductor	Copper, Silver plated	Strand-07	2.25 mm
Dielectric	SPEX (Crosslink Foam PE)		7.28 mm
Outer conductor	Copper, Silver plated	Braid, 93%	8 mm
Outer conductor	Copper, Silver plated	Braid, 95%	8.6 mm
Jacket	RADOX EM104	RAL 9005 - bk	11.1 mm +/- 0.1 mm

Electrical data	
Impedance	50 Ω +/- 2Ω
Operating frequency	≤ 6 GHz
Capacitance	101.4 pF/m
Velocity of signal propagation	66 %
Signal delay	5.03 ns/m
Screening effectiveness	81 dB at frequency 0.1 GHz ... 6GHz
Insulation resistance	10000000 MΩ*m
Operating Voltage (at sea level)	≤ 5 kVrms
Test voltage (50 Hz/1 min)	≤ 10 kVrms

Mechanical data	
Weight	approx. 203 g/m
Static bending radius	≥ 50 mm
Repeated bending radius	110 mm (bendings, up to 50)
Dynamic bending radius	< 170 mm

RG214 LSFH, 50 Ohm, 6 GHz, 105°C, Ø11.1 mm, RADOX® jacket

RADOX_RF_214

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
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: HL3 An operating temperature of -55°C is feasible for static applications.

Suitable connectors

Cable group	U43
-------------	-----

Ordering information

Item number	Item description	Available as assembly only
85023731	RADOX_RF_214	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 =	0.2203	b coefficient typical =	0.0874
fmax =	6	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	0.078	0.024	1771
0.20	0.116	0.035	1252
0.30	0.147	0.045	1022
0.40	0.174	0.053	885
0.60	0.223	0.068	723
0.80	0.267	0.081	626
1.00	0.308	0.094	560
1.20	0.346	0.106	511
1.40	0.383	0.117	473
1.60	0.418	0.128	443
1.80	0.453	0.138	417
2.00	0.486	0.148	396
2.50	0.567	0.173	354
3.00	0.644	0.196	323
3.50	0.718	0.219	299
4.00	0.790	0.241	280
4.50	0.861	0.262	264
5.00	0.930	0.283	250
5.50	0.997	0.304	239
6.00	1.064	0.324	229

HUBER+SUHNER is certified by ISO 9001, ISO 14001, ISO 45001, IATF 16949, AS/EN 9100 and ISO/TS 22163-IRIS. Waiver: Facts and figures herein are for information only and do not represent any warranty of any kind.

RG214 LSFH, 50 Ohm, 6 GHz, 105°C, Ø11.1 mm, RADOX® jacket
RADOX_RF_214

DOCUMENT PIM-P475 / Date of publication: 29.08.2025 / uncontrolled copy