

RG179 LSFH, 75 Ohm, 3 GHz, 105°C, ø2.8 mm, RADOX® jacket

RADOX_RF_179

Properties

- Halogen free alternative to RG_179
- Low smoke
- Ozone, UV and weathering resistance
- Railway qualified
- 75 Ohm characteristic impedance
- HUBER+SUHNER RADOX® jacket material



Construction			
Component	Material	Detail	Diameter
Centre conductor	Steel, Copper + Silver plated	Strand-07	0.305 mm
Dielectric	SPEX (Crosslink Foam PE)		1.55 mm
Outer conductor	Copper, Silver plated	Braid, 94%	2 mm
Jacket	RADOX EM104	RAL 9005 - bk	2.8 mm +/- 0.1 mm

Electrical data	
Impedance	75 Ω +/- 3Ω
Operating frequency	≤ 3 GHz
Capacitance	63 pF/m
Velocity of signal propagation	69.7 %
Signal delay	4.78 ns/m
Screening effectiveness	≥ 40 dB at frequency 0.01 GHz ... 1GHz
Insulation resistance	10000000 MΩ*m
Operating Voltage (at sea level)	≤ 1 kVrms
Test voltage (50 Hz/1 min)	≤ 2 kVrms

Mechanical data	
Weight	approx. 13 g/m
Static bending radius	≥ 5 mm
Repeated bending radius	25 mm (bendings, up to 50)

Environmental data	
Operation temperature	-40 °C ... 105 °C
Installation temperature	-20 °C ... 60 °C
Flame propagation standard	EN 60332-1-2
	EN 50305, 9.1.2

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Environmental data	
	UL 1581 § 1100
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	U5

Ordering information		
Item number	Item description	Available as assembly only
85023705	RADOX_RF_179	No

Power Matrix			
Calculation: typical Attenuation [formula: (a*f^0.5 + b*f)] and maximum Power CW [formula: (p/f^0.5)]			
a coefficient typical =	0.8288	b coefficient typical =	0.0725
fmax =	3	P at 1 GHz =	45
Frequency	Nom. attenuation	Nom. attenuation	CW power
GHz	(dB/m)	(dB/ft)	(W)
	sea level 25°C ambient temperature	sea level 25°C ambient temperature	sea level 40°C ambient temperature
0.10	0.269	0.082	142
0.20	0.385	0.117	101
0.30	0.476	0.145	82
0.40	0.553	0.169	71
0.60	0.685	0.209	58
0.80	0.799	0.244	50
1.00	0.901	0.275	45
1.20	0.995	0.303	41
1.40	1.082	0.330	38
1.60	1.164	0.355	36
1.80	1.242	0.379	34
2.00	1.317	0.401	32
2.50	1.492	0.455	28
3.00	1.653	0.504	26

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