

SLink
Cable

1-1/4"R FRNC

SL 114R FRNC



This product used for mobile network and telecommunication equipment

Material and dimensions

Inner conductor	Corrugated Copper tube	Ø 13.10
Dielectric	mm Foam PE	Ø 32.50
Outer conductor	mm Corrugated copper(Annularly)	Ø 35.80
Jacket	mm PE, Flame Retardant Non Corrosive(FRNC)	Ø 38.60
	mm Black, UV resistant, Halogen free	
Ink marking: metric length	RosenbergerSLink™_SL 114R_FRNC_50Ω_ _ _ _ _ (DD+MM +SS+YY+NNNNN)_ _ _ _ _ XXXXm	

Documents

Fire resistance	IEC 60332-1-2:2004; IEC 60332-3-24:2000
	IEC 60754-1/-2:1994; IEC 61034-2:2005
UV resistance	GB 14049-093; EN 50289-4-17, Method A

Electrical Specification

Impedance	50 ± 1 Ω
Relative Velocity of Propagation	88%
Capacitance	76 pF/m
Inductance	0.190 µH/m
Maximum Operating Frequency	4 GHz
Peak Power Rating	200 kW
Insulation Resistance	≥ 10 GΩ x km
DC Breakdown Voltage Jacket	10000V
Spark Test Voltage Inner	10000 Vrms
Conductor DC-resistance Outer	≤ 0.91 Ω/km
Conductor DC-resistance	≤ 0.90 Ω/km

Environmental Specification

Installation Temperature	-20°C to +60°C
Operating Temperature	-40°C to +85°C
Storage Temperature	-70°C to +85°C
2011/65EU (RoHS)	compliant
CPR	B2ca - s1a,d0,a1

Dieses Dokument ist urheberrechtlich geschützt • This document is protected by copyright • Rosenberger Hochfrequenztechnik GmbH & Co. KG
RF_35/05.10/6.0

Technical Data Sheet

Rosenberger

SLink
Cable

1-1/4"R FRNC

SL 114R FRNC

Mechanical Specification

Cable weight	≈ 860 kg/km
Tensile strength	2500 N
Min. bending radius (single)	200 mm
Min. bending radius (repeated)	380 mm
Number of bends, minimum (typical)	15 (50)
Bending moment	50 Nm
Flat plate crush strength	20 N/mm
Recommended hanger spacing	1.2 m

Standard Conditions

Attenuation, Ambient Temperature	20°C
Average Power, Ambient Temperature	40°C
Average Power, Inner Conductor Temperature	100°C

Return Loss

Return loss(Band A)	≤ -24dB 800 to 1000MHz
Return loss(Band B)	≤ -24dB 1700 to 1900MHz
Return loss(Band C)	≤ -24dB 1900 to 2200MHz
Return loss(Band D)	≤ -24dB 2200 to 2500MHz
Return loss(Band E)	≤ -21dB 2500 to 3000MHz

Cable assemblies with a length up to 20m should meet the following requirement:

Return Loss	≤ -30dB @ DC-1000MHz
	≤ -28dB @ 1000 -2500MHz
	≤ -26dB @ 2500-3000MHz
Intermodulation (3rd order, 2 x 20W)	≤ -117dBm @ 910MHz or 1800MHz

Attenuation

Frequency (MHz)	Attenuation (dB/100m)	Average Power (KW)
100	0.80	12.9
200	1.15	8.81
300	1.55	6.37
400	1.72	5.69
450	1.83	5.40
800	2.47	4.03
900	2.64	3.73
1000	2.80	3.50
1800	3.96	2.50
2000	4.23	2.31
2200	4.48	2.19
2500	4.82	2.03
2700	5.05	1.86
3000	5.35	1.79
3500	5.9	1.53
3700	6.16	1.37
3800	6.25	1.25

Maximum attenuation value shall be 105% of the nominal attenuation value
Other frequencies on request

While the information has been carefully compiled to the best of our knowledge, nothing is intended as representation or warranty on our part and no statement herein shall be construed as recommendation to infringe existing patents. In the effort to improve our products, we reserve the right to make changes judged to be necessary.

Draft	Date	Check	Approved	Date	Rev.	Engineering change number	Name	Date
Feifei	13/12/11	Feifei	Gramsamer	23.04.24	g	24-RL024	Schnitzer	23.04.24
Rosenberger Hochfrequenztechnik GmbH & Co. KG, Germany Tel.: +49 8684 18-0 Fax: +49 8684 18-499 www.rosenberger.de email: info@rosenberger.de						Rosenberger Asia Pacific Electronic Co., Ltd., China Tel.: +86 10 80481995 Fax: +86 10 80497052 www.rosenbergerap.com email:info@rosenbergerap.com		Page 2 / 2

Dieses Dokument ist urheberrechtlich geschützt • This document is protected by copyright • Rosenberger Hochfrequenztechnik GmbH & Co. KG

RF_35/05_10/6.0