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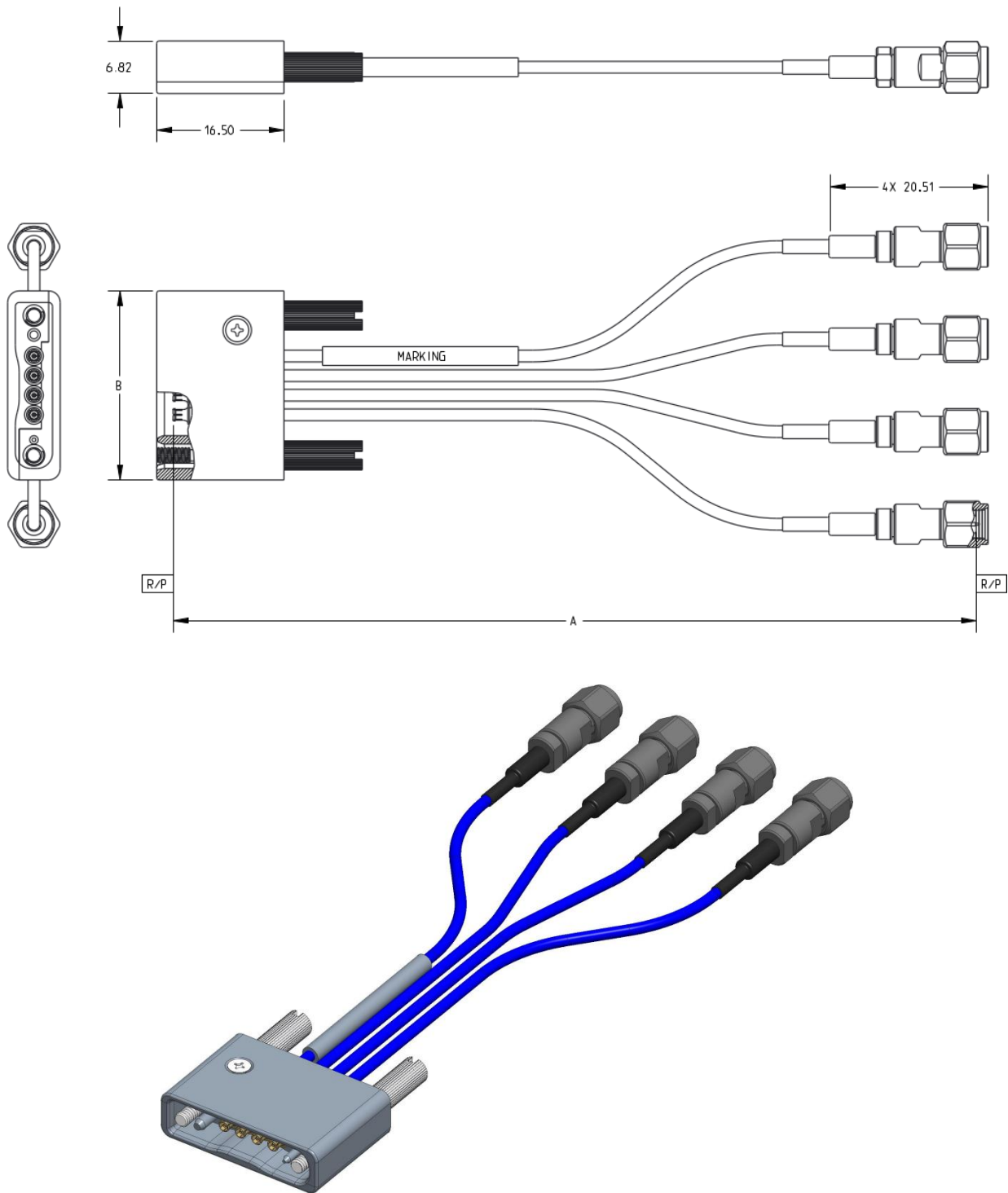
FR-096
RNA Data Sheet - Cable Assembly
Rev IR 01/04/2023

Technical Data Sheet

Rosenberger

Cable assembly
SMPX / RPC-1.00 – RTK 047-K2

H70U-W2YY-01S1-XXXXX



All dimensions are in mm; tolerances:

$\pm 3.0\text{mm}$ for $A \leq 100$: $\text{XXX} \pm 2.0$; > 100 to ≤ 1500 : $\text{XXX} \pm 5.0$; > 1500 to ≤ 3000 : $\text{XXX} \pm 10.0$; > 3000 : $\pm 1.5\%$

Draft	Date	Approved	Date
L. Weber	4/22/2024	J. Havener	4/22/2024

Rev	Engineering Change Number	Name	Date
302	Updated Marking	D.Hoeschen	12/04/2024

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Page
1 / 2

Technical Data Sheet

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Cable assembly
SMPX / RPC-1.00 – RTK 047-K2

H70U-W2YY-01S1-XXXXX

Available Variants

Type	Max Insertion Loss	Marking
H70U-W2YY-01S1-XXXXX	110 GHz: $\leq 0.0240 \text{ dB/mm} \cdot A \text{ mm} + 0.84 \text{ dB}$	Rosenberger NA H70U-W2YY-01S1-XXXXX WWWWWWW-SSS wwwyy
H70U-W2YY-01S1-00150	DC to 14 GHz: 1.00 dB max 14 to 26.5 GHz: 1.50 dB max 26.5 to 40 GHz: 1.75 dB max 40 to 65 GHz: 2.60 dB max 65 to 90 GHz: 3.75 dB max 90 to 110 GHz: 4.50 dB max	Rosenberger NA H70U-W2YY-01S1-00150 WWWWWWW-SSS wwwyy

YY – number of ports

XXXXX – end to end length in mm = A

WWWWWWW – lot code

www – week

yy – year

SSS – serial no.

Note: max Insertion Loss:

First Constant = Cable attenuation in dB/mm; Second Constant = Connector left and Connector right

Available SMPX Variations

Part Number	Number of Ports	Width (B) in (mm)	SMPX Weight (g)	Total Assembly Weight
W2K101-270L3-02	2	17.84	11.3	0.0116 g/mm + 11.3 g + 4.8 g
W2K101-270L3-04	4	24.52	12.9	0.0232 g/mm + 12.9 g + 9.6 g
W2K101-270L3-08	8	34.68	15.2	0.0464 g/mm + 15.2 g + 19.2 g
W2K101-270L3-16	16	55.00	19.8	0.0928 g/mm + 19.8 g + 38.4 g

Weight:

First Constant = Cable weight per mm; Second Constant = SMPX Connector Left; Third Constant = Precision Connectors Right

Assembly Parts

Connector left	SMPX female	per Available Variants table
Connector right	RPC-1.00 male	
Cable	RTK 047-K2	Blue
Strain relief	Heat Shrink Tube	Black

Electrical Data

Impedance	50 Ω
Frequency	DC to 110 GHz
Return Loss ¹	$\geq 20 \text{ dB}$, 50 MHz to 6 GHz $\geq 18 \text{ dB}$, 6 to 12 GHz $\geq 16 \text{ dB}$, 12 to 20 GHz $\geq 15 \text{ dB}$, 20 to 30 GHz $\geq 13 \text{ dB}$, 30 to 55 GHz $\geq 11 \text{ dB}$, 55 to 65 GHz $\geq 10 \text{ dB}$, 65 to 90 GHz $\geq 9 \text{ dB}$, 90 to 110 GHz
Insertion Loss ¹	see table Available Variants
Delay Matching	pair-matched within 1.0 ps

¹ Return Loss and Insertion Loss includes the measurement adaptor

Mechanical Data

Minimum bend radius:	3.2 mm
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Environmental Data

Temperature range	-40°C to +120°C
RoHS	compliant

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.

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Page
2 / 2