

# Technical Data Sheet

# Rosenberger

Cable assembly  
SMA (m) / SMA (m) – APSK 0R  
SMA (m) / SMA(f) – APSK 0R

**APSK-0R-XXXXX-HH**  
**APSK-0R-XXXXX-HJ**

Nominal diameter over H.S. = 11.1 mm



All dimensions are in mm; tolerances: SMA(m) – SMA (m) shown above  
≤ 100: XXX ± 2.0; > 100 to ≤ 1500: XXX ± 5.0; > 1500 to ≤ 3000: XXX ± 10.0; > 3000: ± 1.5%

### Available variants

Type	Max Insertion Loss	Marking	Weight (g) / pce
APSK-0R-XXXXX-HH M- SMA M, - HJ = SMA M SMA F	$\leq (.53\sqrt{F} - .0288)L + .08\sqrt{F}$ L(meters), F(GHz)	ROSENBERGER YYWW APSK-0R-XXXXX-YY	TBD

XXXXX – length in mm = A, L in Meters  
WW – week YY – year

Note: max Insertion Loss:  
Weight:

First Constant = Cable weight per mm; Second Constant = Connector left and Connector right per pce

### Assembly parts

Connector, left	SMA(m)	32S121-2U7S3
Connector, right	SMA(m)/SMA(f)	32K121-2U7S3/32K121-2U7S3
Cable	Cable Type	Rosenberger APSK 0R
Armor	Description/construction	Integrated
Strain Relief	Color	Black

### Electrical data

Impedance	50 Ω
Frequency	DC to 18 GHz
Delay Matching	PY: Not applicable LY: Not applicable
Intermodulation (3rd order @ 2 x 20 W)	Not applicable
Return Loss <sup>1</sup>	≥ 19 dB, DC to 18 GHz
Insertion Loss <sup>1</sup>	see table above and below.

<sup>1</sup> Return Loss and Insertion Loss includes the measurement adaptor

### Mechanical data

Minimum bend radius:	
Single	25.4 mm
Armor diameter	Ø7.75 mm
Crush Resistance	43 N/mm
Diameter, nominal	7.75mm(.305 inches)

### Environmental data

Temperature range	-40°C to +125°C
IP Rating	N.A.
RoHS	Compliant

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Draft	Date	Approved	Date	Rev.	Engineering change number	Name	Date
B.Cardwell	4/14/2020	B.Cardwell	4/14/2020	100	20_e000	B.Cardwell	4/14/2020
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### Additional Electrical Specifications

Return Loss Stability(min)	-30 dB
Velocity of Propagation	85%
Shielding effectiveness	>90 dB @ 1 Ghz

### Phase Stability

Parameter	1 Ghz	10Ghz	18Ghz
Return Loss(minimum)	30 dB	25dB	20dB
Insertion Loss stability (max @ 25°C)	+/- .05 dB/m	+/- 1.25 dB/m	+/- 1.65 dB/m
Phase stability, natural curl	+/- 1°	+/- 3°	+/- 4°
Phase stability, reverse curl	+/- 1°	+/- 3°	+/- 4°
Return Loss stability natural curl	>30 dB	>30 dB	>30 dB
Return Loss stability reverse curl	>30 dB	>30 dB	>30 dB

### Packaging Information

Product shipped in a pink, anti-static bag, with label and S11, S12, S21 and S22 test results

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