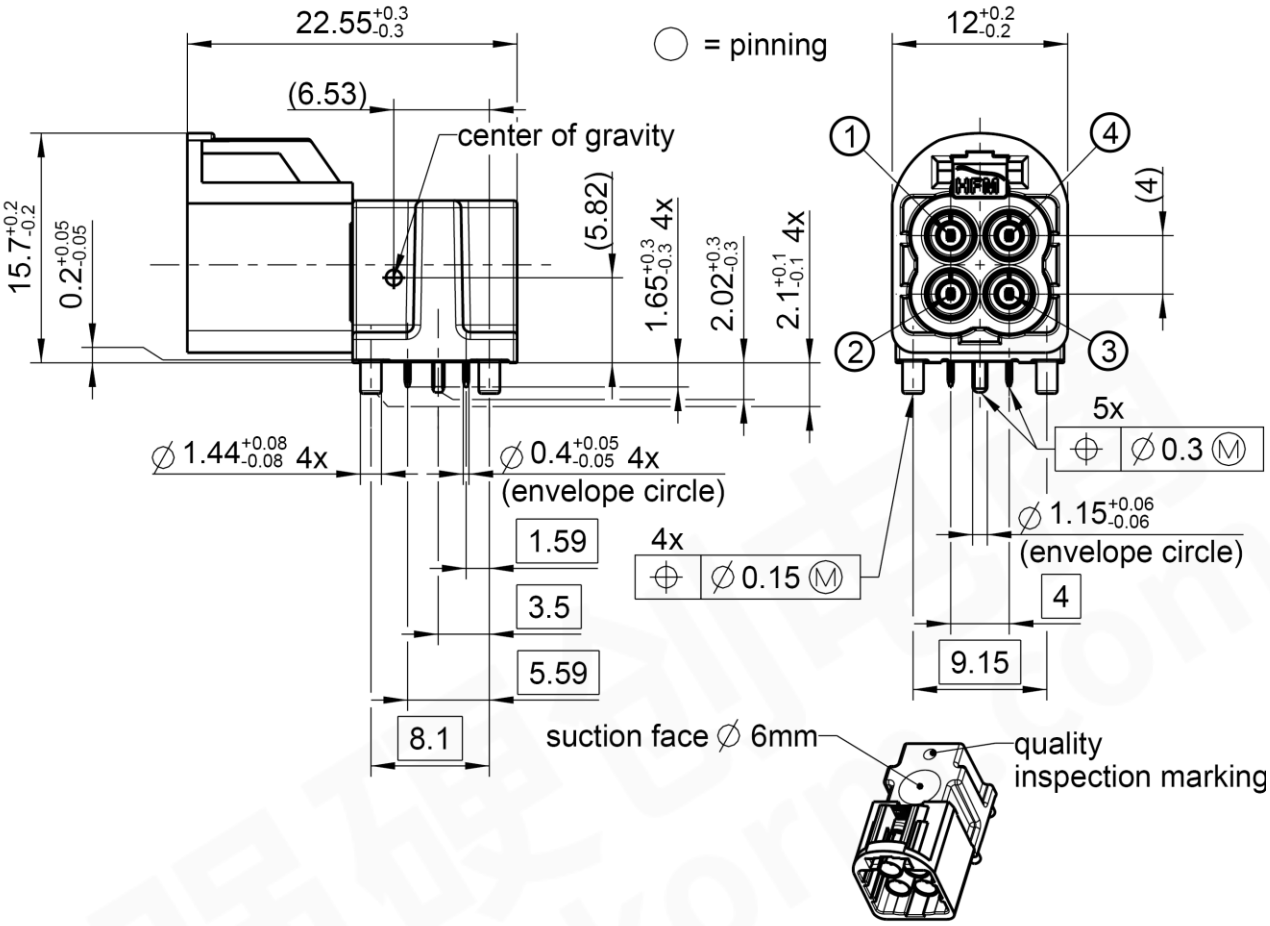
Technical Data Sheet

Rosenberger

HFM®
High-Speed FAKRA Mini

RIGHT ANGLE PLUG
PCB w. HOUSING

AMS22D-40MZ5-Y



All dimensions are in mm

Interface

According to	RN_108-04

Documents

PCB layout	MB_604
Tape & Reel packaging	VG361.17500

Material and plating

Connector parts	**Material**	**Plating**
Center contact	Bronze	
-Interface		Gold, min. 0.15 µm, over nickel
-PCB		Tin, min. 0.5 µm, over nickel
Outer contact 1 (Interface)	Bronze	Tin, min. 1.5 µm
Outer contact 2 (PCB)	Zinc alloy	Tin, min. 2 µm
Outer contact sheet	Bronze	Tin, min. 3 µm
Dielectric	LCP	
Housing	PA-GF50	

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Electrical data

Impedance	50 Ω
Frequency	DC to 9 GHz
Return loss	≥ 25 dB, DC to ≤ 3 GHz ≥ 20 dB, > 3 GHz to ≤ 6 GHz ≥ 12 dB, > 6 GHz to ≤ 9 GHz
Insertion loss	≤ 0.1 x $\sqrt{f(GHz)}$ dB
Insulation resistance	≥ 1x10^3 MΩ
Center contact resistance	≤ 15 mΩ
Outer contact resistance	≤ 5 mΩ
Test voltage	≤ 800 V rms
Working voltage	≤ 60 V DC
Power current	≤ 1 A DC
Cross talk (optional)	≤ -60 dB up to 10 GHz

- Connector only, VSWR in application depends decisive on PCB layout -

Mechanical data

Mating cycles	≥ 25
Engagement force	≤ 45 N*
Disengagement force	≥ 5 N
Retention force latch	≥ 110 N
Coding efficiency	≥ 200 N

** according to USCAR 25 Rev. 3 and the tests specified in USCAR 17 Rev.5 TG-G*

Environmental data

Temperature range	-40 °C to +105 °C
Thermal shock	ISO 20860-2 clause 9.2
Temperature and humidity	ISO 20860-2 clause 9.3
Vibration and mechanical shock	ISO 20860-2 clause 9.1
Dry heat	ISO 20860-2 clause 9.4
Soldering profile	acc. to IEC 60068-2-58; Group 3 (250 °C / 30 s)
RoHS	compliant

Tooling

N/A

Packing

Standard (optional)	50 pcs. in Blister 175 pcs. Tape & Reel
Weight	7.75 g

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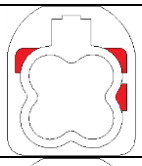
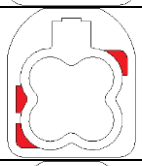
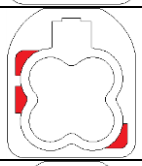
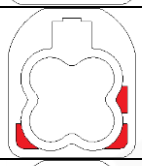
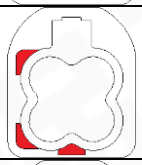
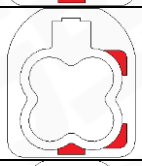
Coding

Part Number must be accomplished by codification

Coding		Color	RAL	Part-Number-RT
	A	black	sim. 9005	AMS22D-40MZ5-A
	B	white	sim. 9010	AMS22D-40MZ5-B
	C	blue	sim. 5012	AMS22D-40MZ5-C
	D	claret violet	sim. 4004	AMS22D-40MZ5-D
	E	green	sim. 6017	AMS22D-40MZ5-E
	F	brown	sim. 8011	AMS22D-40MZ5-F
	Z	waterblue	sim. 5021	AMS22D-40MZ5-Z

Draft	Date	Approved	Date	Rev.	Engineering change number	Name	Date
A. Krejber	27.04.16	F. Bachmeier	19.03.20	905	20-0260	M. Mamou	19.03.20

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