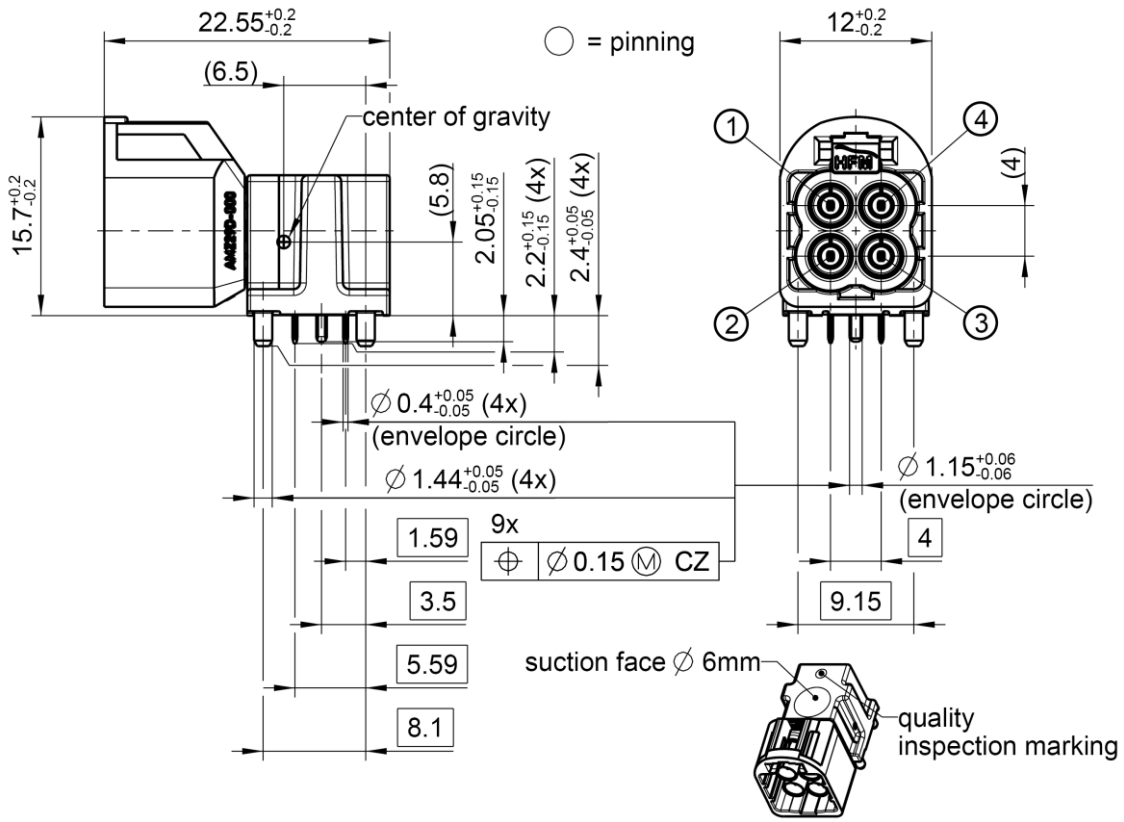
Technical Data Sheet

Rosenberger

HFM®
High-Speed FAKRA Mini

RIGHT ANGLE PLUG
PCB WITH HOUSING

AMS29D-40MZ5-Y



All dimensions are in mm

Interface

According to	RN_108-04

Documents

PCB layout	MB_604
Tape & Reel packaging	VG461.18500

Material and plating

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

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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	≥ 150 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

Packing

Standard	185 pcs in tape & reel
Weight	7.63 g

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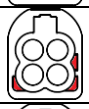
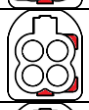
Coding

Part number has to be accomplished by codification

Coding		Color	RAL	Part-Number-RT
	A	black	sim. 9005	AMS29D-40MZ5-A
	B	white	sim. 9010	AMS29D-40MZ5-B
	C	blue	sim. 5012	AMS29D-40MZ5-C
	D	claret violet	sim. 4004	AMS29D-40MZ5-D
	E	green	sim. 6017	AMS29D-40MZ5-E
	F	brown	sim. 8011	AMS29D-40MZ5-F
	G	grey	sim. 7036	AMS29D-40MZ5-G
	Z	waterblue	sim. 5021	AMS29D-40MZ5-Z

b

Change History

Rev.	Date	Change
a00	10.02.22	Initial release
b00	18.05.22	Coding changed

Draft	Date	Approved	Date
F. Bachmeier	26.03.19	T. Georg	18.05.2022

Rev.	Engineering change number	Name	Date
b00	22-0781	A. Krause	18.05.2022

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