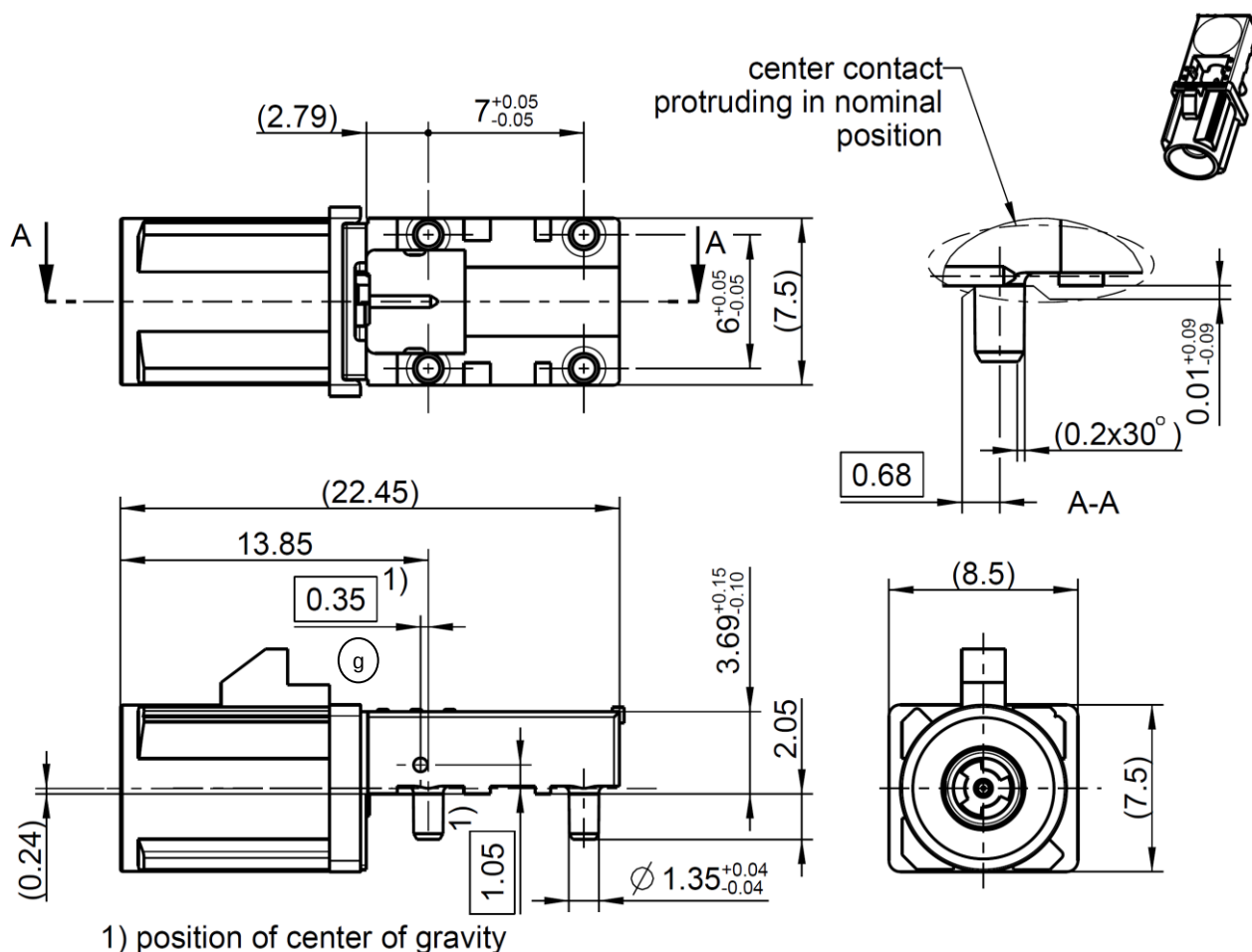




All dimensions are in mm; tolerances according to ISO 2768 m-H

Interface

According to

ISO 20860-1

Documents

PCB layout

MB_355; MB_172

Tape & reel packaging

VG255.43000

Material and plating

Connector parts

Center contact
Outer contact
Dielectric
Housing

Material

Brass
Zinc alloy
HTN
HTN

Plating

AuroDur®, gold plated
Tin, 2-5 µm, over nickel 1-5 µm

Electrical data

Impedance	50 Ω
Frequency	DC to 6 GHz
Return loss	≥ 26 dB, DC to ≤ 1 GHz
	≥ 23 dB, > 1 to ≤ 2.4 GHz
	≥ 20 dB, > 2.4 to ≤ 4 GHz
	≥ 15 dB, > 4 to ≤ 6 GHz
Insertion loss	≤ 0.15 x $\sqrt{f(\text{GHz})}$ dB (g)
Insulation resistance	≥ 1x10 ³ MΩ
Center contact resistance	≤ 5 mΩ
Outer contact resistance	≤ 5 mΩ
Test voltage	750 V rms
Working voltage	335 V rms
Power current	≤ 1 A DC

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

Mechanical data

Mating cycles	≥ 25
Engagement force	≤ 25 N
Disengagement force	≥ 2 N
Retention force latch	≥ 110 N
Coding efficiency	≥ 40 N

Environmental data

Temperature range	-40 °C to +125 °C * (i)
Thermal shock	DIN 72594-2 clause 8.2
Temperature and humidity	DIN 72594-2 clause 8.3
Vibration and mechanical shock	DIN 72594-2 clause 8.1
Dry heat	DIN 72594-2 clause 8.4
Resistance to soldering heat (h)	acc. to IEC 60068-2-58 Group 3 & 4
RoHS	compliant

*Only valid for the connector itself. Depending on cable side. (i)

Packing

Standard	430 pcs in tape & reel
Weight	2.4 g

Storage condition

Moisture Sensitivity	acc. Level 2 (only floor life) (h)
Time	2 years
Condition	≤ 30 °C / 60 %RH

Coding

Part Number has to be accomplished by codification

Coding		Color	RAL	Part-Number
	A	black	sim. 9005	59S2AQ-40MT5-A_1
	B	white	sim. 9001	59S2AQ -40MT5-B_1
	C	blue	sim. 5005	59S2AQ -40MT5-C_1
	D	claret violet	sim. 4004	59S2AQ -40MT5-D_1
	E	green	sim. 6002	59S2AQ -40MT5-E_1
	F	brown	sim. 8011	59S2AQ -40MT5-F_1
	G	grey	sim. 7031	59S2AQ -40MT5-G_1
	H	violet	sim. 4003	59S2AQ -40MT5-H_1
	I	beige	sim. 1001	59S2AQ-40MT5-I_1
	K	curry	sim. 1027	59S2AQ-40MT5-K_1
	L	carmine-red	sim. 3002	59S2AQ-40MT5-L_1
	M	pastel orange	sim. 2003	59S2AQ-40MT5-M_1
	N	pastel green	sim. 6019	59S2AQ-40MT5-N_1
	Z	waterblue	sim. 5021	59S2AQ-40MT5-Z_1

Technical Data Sheet				Rosenberger			
FAKRA-HF		RIGHT ANGLE PLUG PCB WITH HOUSING		59S2AQ-40MT5-Y_1			

Change History

Rev.	Date	Change
g00	02.08.19	-housing changed -added new define for Insertion loss
h00	08.07.20	- changed definition of storage conditions - changed definition of soldering heat - Tooling removed - Minor editorial changes
i00	05.03.21	- temperature range up to 125 °C - addition to higher temperature range

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	Approved	Date	Rev.	Engineering change number	Name	Date
M. Bieberbach	19.09.14	J. Rappensperger	05.03.21	i00	21-0229	M. Mamou	05.03.21

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