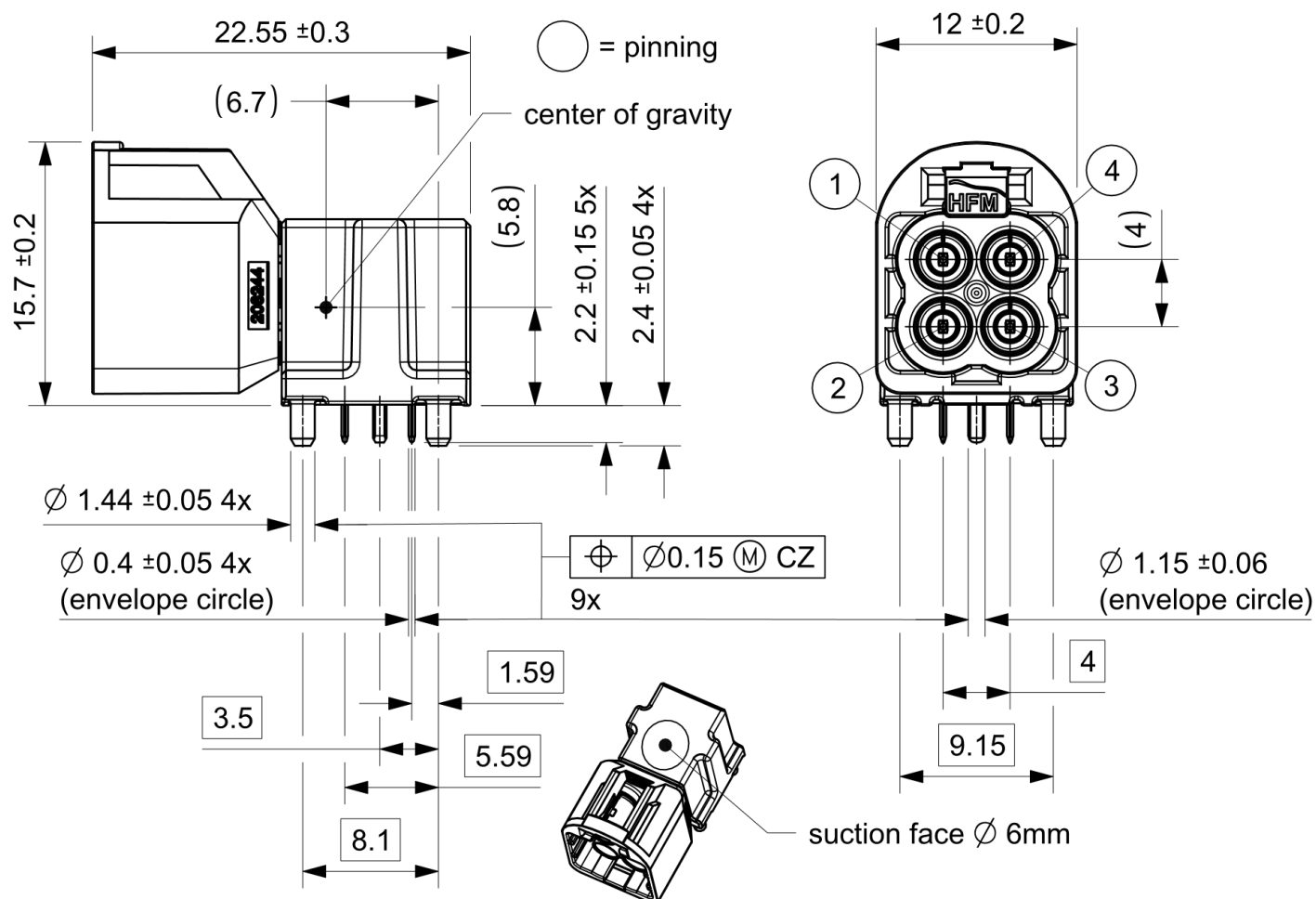




All dimensions are in mm; piece part tolerances according to ISO 2768 mH

Interface

According to

USCAR Interface Drawing: 888-U-004-2-Z02

Material and plating

Connector parts

Center contact
- Interface
- PCB
Outer contact (Interface)
Outer contact (PCB)
Outer contact sheet
Dielectric
Housing

Material

Bronze

Bronze
Zinc alloy
Bronze
LCP
HTN

Plating

Gold, min. 0.15 µm, over chemical nickel
Tin, min. 0.5 µm, over chemical nickel
Tin, min. 1.5 µm
Tin, min. 2 µm
Tin, min. 3 µm

REVISION:	ECR/ECN INFORMATION:	TITLE:	SHEET No.
A3	EC No: 823775 DATE: 2025/06/16	HFM PCB PLUG – R/A QUAD 2.20 MM PCB TAIL	1 of 4
DOCUMENT NUMBER:	CREATED / REVISED BY:	CHECKED BY:	APPROVED BY:
2082440200/PSD/000/A3	PRAVEC2	ADITHS1	ADITHS1

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 $\sqrt{(\text{GHz})}$ dB
Insulation resistance	≥ 1x10 ³ MΩ
Center contact resistance	≤ 15 mΩ
Outer contact resistance	≤ 5 mΩ
Test voltage	750 V rms
Working voltage	335 V rms
Power current	≤ 1 A DC
Crosstalk	≤ -60 dB up to 10 GHz

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

Mechanical data

Mating cycles	≤ 25
Engagement force	≤ 45N*
Disengagement force	≥ 5N
Retention force latch	≥ 110N
Coding Efficiency	≥ 150N

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

Environmental data

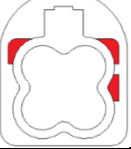
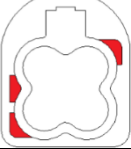
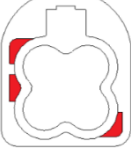
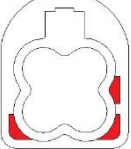
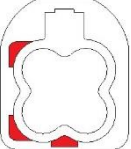
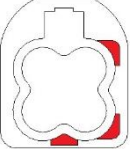
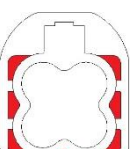
Temperature range	-40°C to +105°C
Thermal shock	ISO 20860-2 clause 9.2
Temperature and humidity	ISO 20860-2 clause 9.3
Vibration and mechanical shock	ISO 20860-2 clause 9.1
Dry heat	ISO 20860-2 clause 9.4
Soldering profile	acc. to IEC 60068-2-58; Group 3 (250°C / 30s)
RoHS	compliant
UL94 Rating	HB

Packing

Standard (optional)	152 pcs in tape & reel
Weight	7.5 g/pc

REVISION:	ECR/ECN INFORMATION:	TITLE:	SHEET No.
A3	EC No: 823775 DATE: 2025/06/16	HFM PCB PLUG – R/A QUAD 2.20 MM PCB TAIL	2 of 4
DOCUMENT NUMBER:	CREATED / REVISED BY:	CHECKED BY:	APPROVED BY:
2082440200/PSD/000/A3	PRAVEC2	ADITHS1	ADITHS1

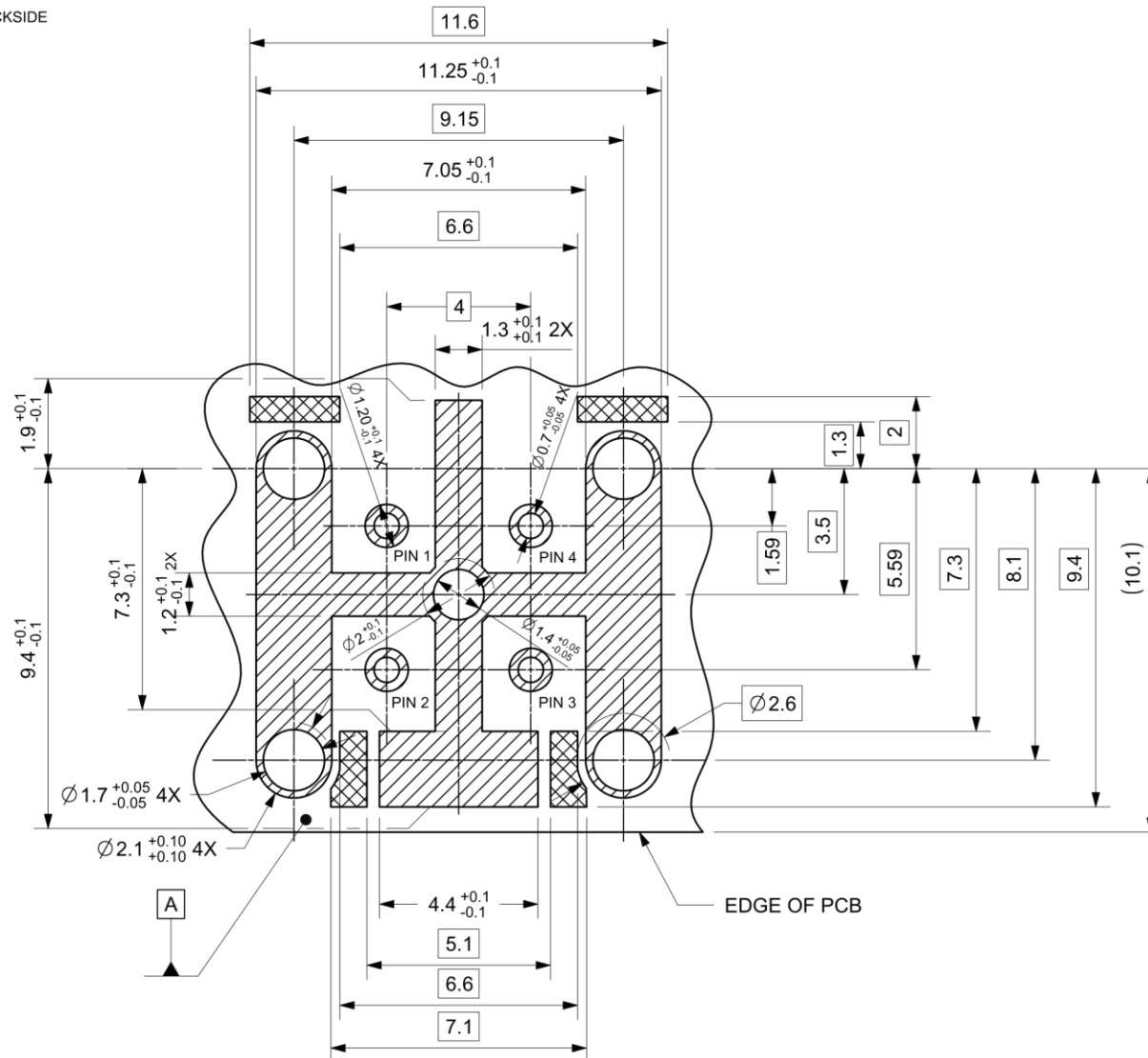
Coding

Coding		Color	RAL	Part Number
	A	black	sim. 9005	2082440200
	B	white	sim. 9010	2082440201
	C	blue	sim. 5012	2082440202
	D	claret violet	sim. 4004	2082440203
	E	green	sim. 6017	2082440204
	F	brown	sim. 8011	2082440205
	G	Grey	Sim. 7036	2082440206
	Z	water blue	sim. 5021	2082440210

HFM is a trademark of Rosenberger Hochfrequenztechnik GmbH & Co. KG.

REVISION:	ECR/ECN INFORMATION:	TITLE:		SHEET No.
A3	EC No: 823775 DATE: 2025/06/16	HFM PCB PLUG – R/A QUAD 2.20 MM PCB TAIL		3 of 4
DOCUMENT NUMBER:		CREATED / REVISED BY:	CHECKED BY:	APPROVED BY:
2082440200/PSD/000/A3		PRAVEC2	ADITHS1	ADITHS1

ALL DRILL HOLES PLATED INCLUSIVE PADS ON THE BACKSIDE
(PADWIDTH MIN. 0.2 mm)



SOLDER AREA 5x



STAND OFF AREA, FREE OF SOLDER 4x

THE STATED DIMENSION ARE ONLY RECOMMENDATIONS

A WIDE VARIETY OF TRANSMISSIONLINE TOPOLOGIES AND PCB-PARAMETERS LIKE PERMITTIVITY, SUBSTRATE THICKNESS, AND BOARD-STACKUP ARE APPLIED BY CUSTOMERS. THESE PARAMETERS HAVE A STRONG IMPACT ON THE HIGH FREQUENCY PERFORMANCE OF THE MOUNTED CONNECTOR

PLEASE NOTE, THAT THE GIVEN LAYOUT IS NOT OPTIMISED TO FIT ALL OF THE POSSIBLE BOARD CONFIGURATIONS REGARDING RF-PERFORMANCE, IT REPRESENTS A RECOMMENDATION FOR OPTIMAL SOLDERABILITY OF THE CONNECTOR

IN ORDER TO GUARANTEE OPTIMAL HIGH FREQUENCY PROPERTIES OF THE CONNECTOR, AN RF-ANALYSIS OF THE CONNECTOR TO BOARD TRANSITION IS RECOMMENDED.

ALL DRILL HOLES $\phi 0.05^{+0.05}_{-0.05}$ mm

SYMBOLS		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION														
 = 0	DIMENSION UNITS		SCALE		CURRENT REV DESC:											
	mm		5:1													
 = 0		GENERAL TOLERANCES (UNLESS SPECIFIED)														
 = 0		ANGULAR TOL ± 0.5°														
 = 0		4 PLACES ±		EC NO: 660897						HFM R/A QUAD PCB LAYOUT						
 = 0		3 PLACES ± 0.05		DRWN: HKASSAB 2021/04/13												
 = 0		2 PLACES ± 0.13		CHK'D: DGILKEY 2021/04/14												
 = 0		1 PLACE ± 0.25		APPR: DGILKEY 2021/04/14					PRODUCT DESIGN DRAWING							
 = 0		0 PLACES ±		INITIAL REVISION:												
 = 0		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		DRWN: FFERROS 2018/10/03					DOCUMENT NUMBER		DOC TYPE		DOC PART		REVISION	
 = 0		THIRD ANGLE PROJECTION		DRAWING		SERIES		MATERIAL NUMBER		CUSTOMER		SHEET NUMBER				
 = 0				A-SIZE		208244		2082449000				1 OF 1				

DOCUMENT STATUS	P1	RELEASE DATE	2021/04/14	14:33:44
-----------------	----	--------------	------------	----------