

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

Interface

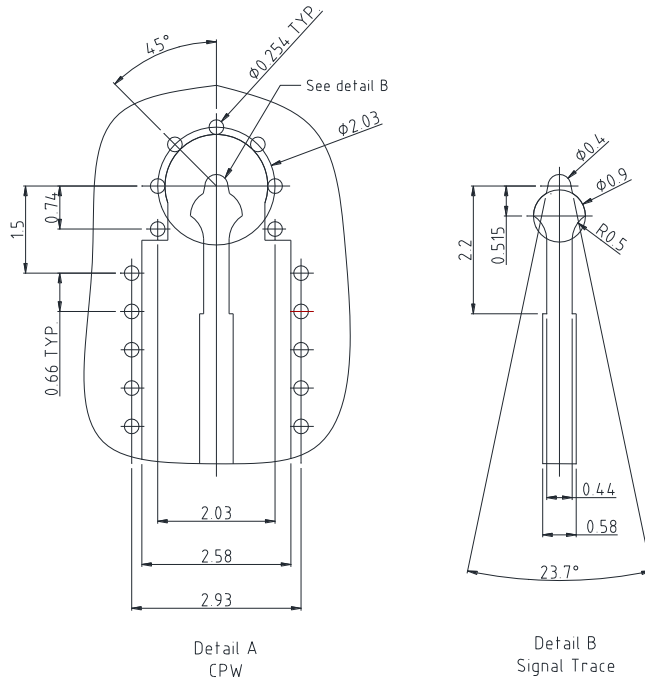
According to

MIL-STD-348A, Fig. 328
Mateable with GPPO™ (Gilbert Engineering Co., Inc)
and SSMP™ (Connectors Devices, Inc.)

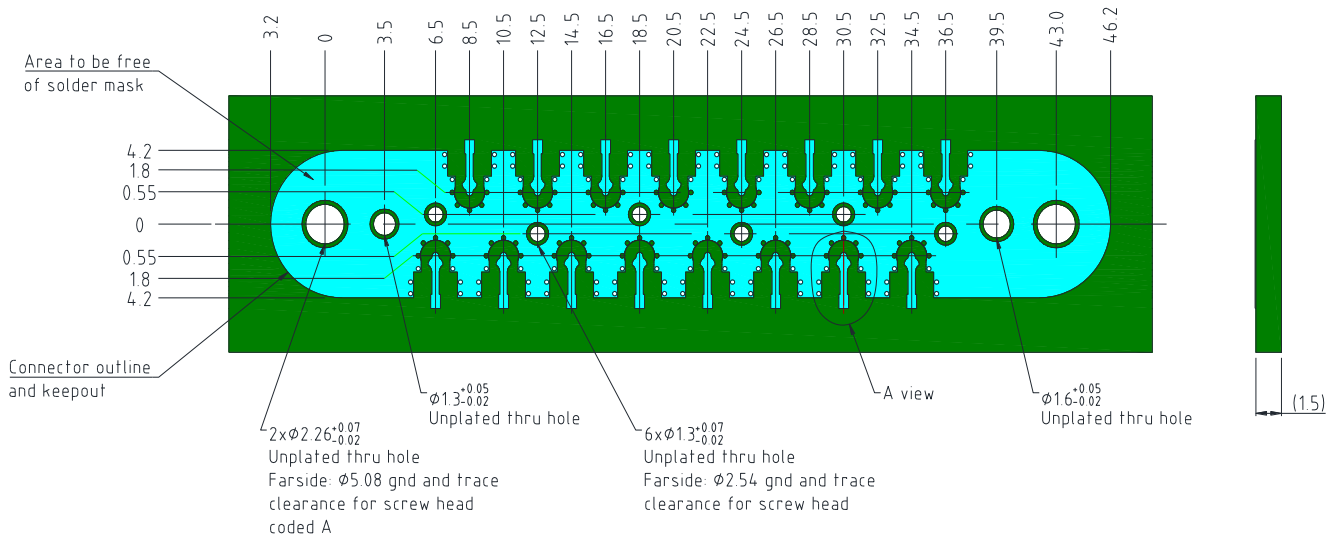
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RF_35/09.14/6.2

PCB layout



Recommended Layout
CPW PCB PIN



CPW PCB shown

A wide variety of transmission line topologies and pcb-parameters like permittivity, substrate thickness, and board-stack up 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 optimum solderability of the connector. In order to guarantee optimum high frequency properties of the connector, an RF-analysis of the connector to board transition is recommended.

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RF_35/09_14/6.2

Mini SMP

16 Channel Block Straight
Solderless compression

MC18S116-40ML5

Material and plating

Connector parts

Center contact
Housing
Locating pins
Dielectric

Material

CuBe
Brass
Stainless steel
PEEK

Plating

AuroDur®, gold plated
AuroDur®, gold plated
Passivated

Electrical data

Impedance 50 Ω
Frequency DC to 65 GHz
Return loss(typical) ≥ 18 dB, DC to 40 GHz
≥ 14 dB, 40 to 65 GHz
Insertion loss ≤ 0.12 x √f [GHz] dB
Insulation resistance ≥ 5 GΩ
Center contact resistance ≤ 6.0 mΩ
Outer contact resistance ≤ 2.0 mΩ
Test voltage 500 V rms
Working voltage 325 V rms

- Return loss in application depends decisive on PCB layout -

Mechanical data

Mating cycles ≥ 1000
Engagement force
-smooth bore 11 N typical each
Disengagement force
-smooth bore 7 N typical each

Environmental data

Temperature range -55°C to +155°C
Thermal shock MIL-STD-202, Method 107, Condition B
Corrosion MIL-STD-202, Method 101
Vibration MIL-STD-202, Method 204, Condition A
Shock MIL-STD-202, Method 213, Condition I
Moisture resistance MIL-STD-202, Method 106, except step 7B
RoHS compliant

Tooling

N/A

Weight

17 g/pce

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
Chengang	16.10.2017	Zack.zhang	13.08.2021	a01	20-0002	Liufei	13.08.2021
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