

1.85mm Female PCB Connector End Launch Clamp/ Solder (Captive Contact) Attachment Removable End Launch, Standard Profile

1.85mm jack removable end launch PCB connector, part number FMCN1520, from Fairview Microwave is in-stock and ships same day. This 1.85mm solderless edge launch connector operates to a maximum frequency of 67 GHz and offers outstanding VSWR of 1.4:1. The clamp-on installation does not require soldering, allowing the connector to be easily reused on multiple chip evaluations, SERDES or millimeter wave developments.

Fairview's 1.85mm solderless end launch PCB connector FMCN1520 datasheet specifications and outline drawing are shown in this PDF below. Our extensive offering of RF, microwave and millimeter wave connectors allows designers to configure and customize their signal connections however they like. From delivering increased data rates, signal integrity, or test fixtures, Fairview Microwave has the right PCB edge launch connector solutions to meet your needs. Fairview Microwave also has the expertise to build your custom cable assemblies for you and ship them same-day.



Configuration:

- 1.85mm Female Connector
- 50 Ohms
- Straight Body Geometry
- End Launch Interface Type
- Clamp/Solder (Captive Contact) Attachment

Features:

- Operating Frequency of 67 GHz Max.
- Good VSWR of 1.4:1
- Gold Plated Beryllium Copper Contact
- Solder or Solderless PCB Contact
- M1.6x0.35 Mounting Screws
- Reusable end launch installation

Applications:

- General Purpose Test
- PCB Applications
- Signal Integrity Measurement
- Coplanar Edge Launches
- Chip Evaluations
- 28 Gbps SERDES
- End Launch Test Fixtures
- Substrate Measurements

Electrical Specifications

Description	Min	Typ	Max	Units
Frequency Range	DC		67	GHz
VSWR			1.4:1	
Insertion Loss			0.5	dB
Operating Voltage (AC)			400	Vrms

Electrical Specification Notes:

Actual VSWR performance is largely dependent on circuit board design. For optimal results, the connector and circuit launch geometry should be modeled using Electromagnetic Simulation tools.

Mechanical Specifications

Size	
Length	0.789 in [20.04 mm]
Width/Dia.	0.5 in [12.70 mm]
Height	0.5 in [12.7 mm]
Weight	0.032 lbs [14.51 g]

Material Specifications

Description	Material	Plating
Contact	Beryllium Copper	Gold
Insulation	PEI	
Outer Conductor	Passivated Stainless Steel	
Body	Passivated Stainless Steel	

Mechanical Specification Notes:

Launch Pin is Gold Plated Beryllium Copper

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Environmental Specifications

Temperature

Operating Range -40 to +125 deg C

Compliance Certifications (see [product page](#) for current document)

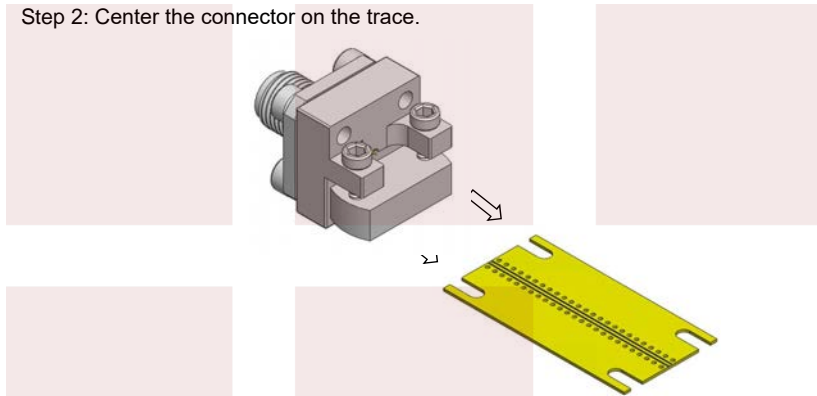
Plotted and Other Data

Notes:

Assembly Instruction

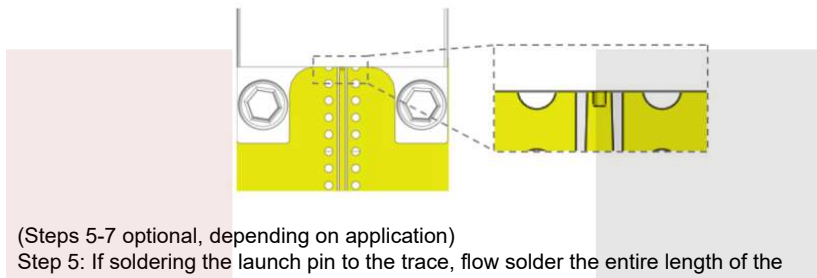
Step 1: Mount the end launch connector in the desired position on the board.

Step 2: Center the connector on the trace.



Step 3: Verify that the transition block is secured on the board.

Step 4: Tighten the M1.6-0.35 mounting screws to the boards suggested torque or until the connectors is secure.

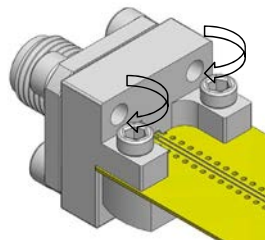


(Steps 5-7 optional, depending on application)

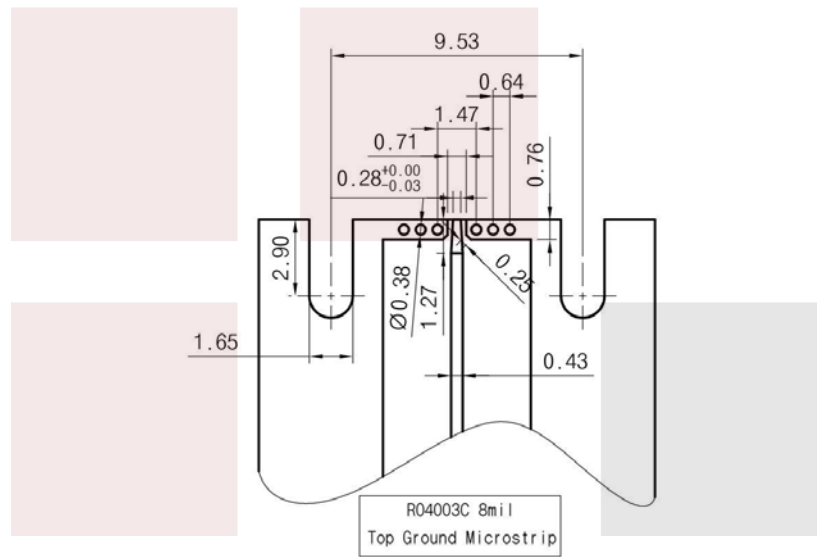
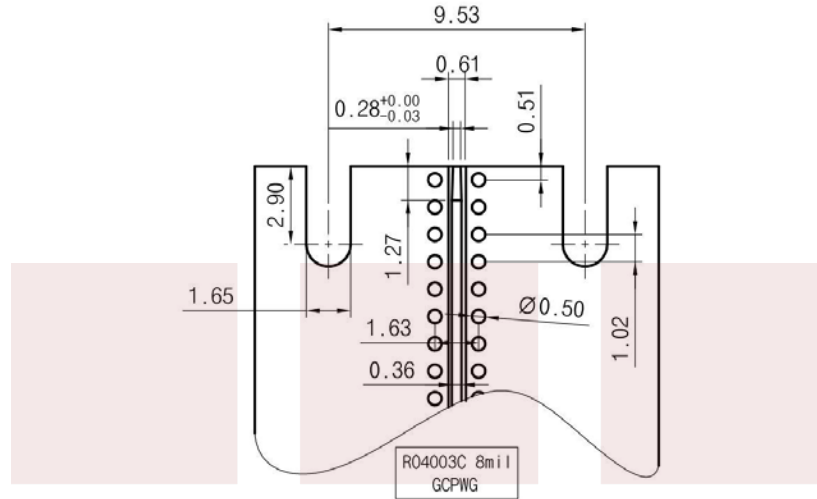
Step 5: If soldering the launch pin to the trace, flow solder the entire length of the contact area.

Step 6: To avoid performance mistakes, remove excess solder.

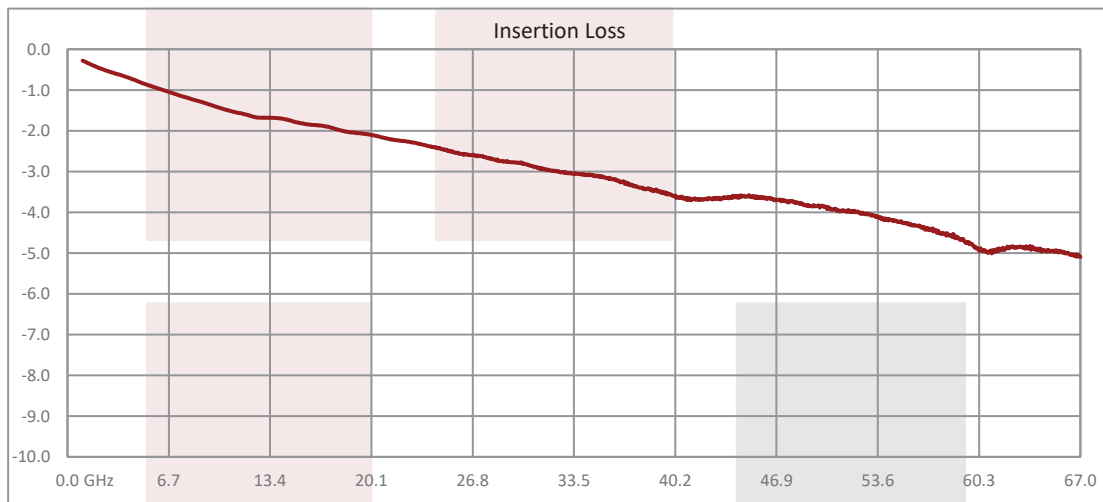
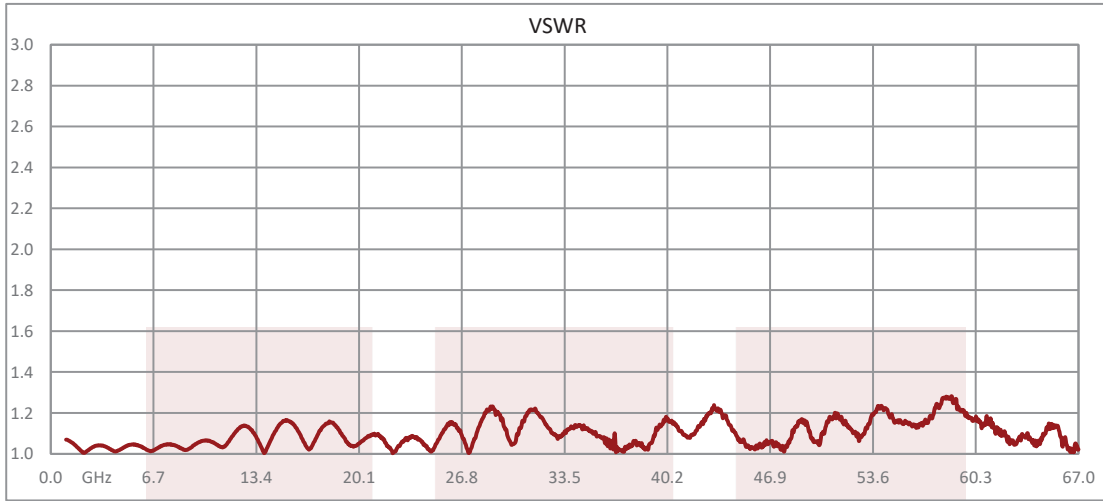
Step 7: Clean any residue from around the solder joint.



Recommended PCB Cutouts



Typical Performance Data



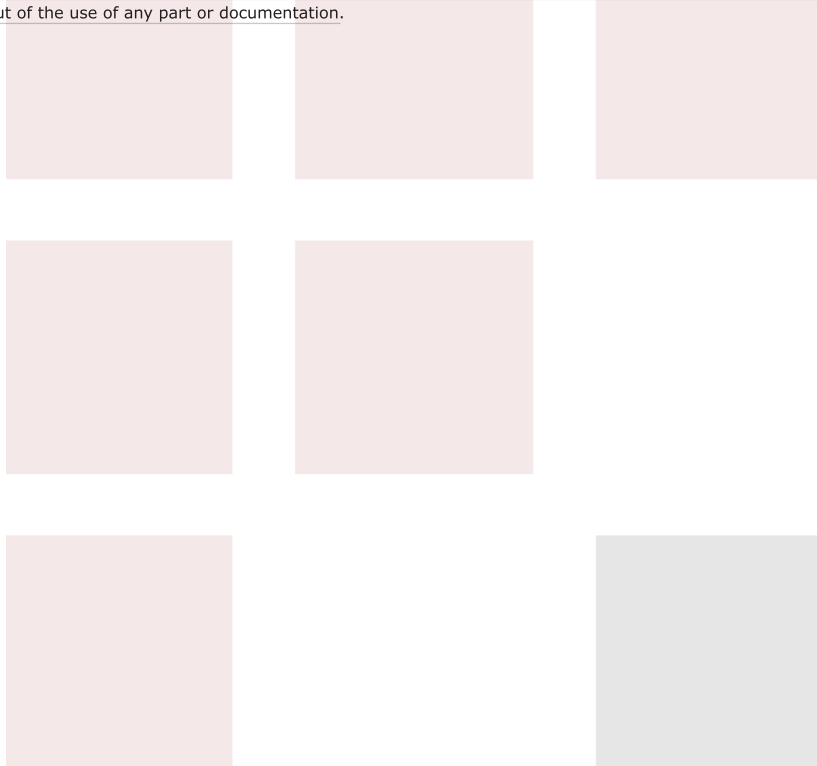
Measurement is for two connectors with 1.0 inch (25.4mm) length of substrate

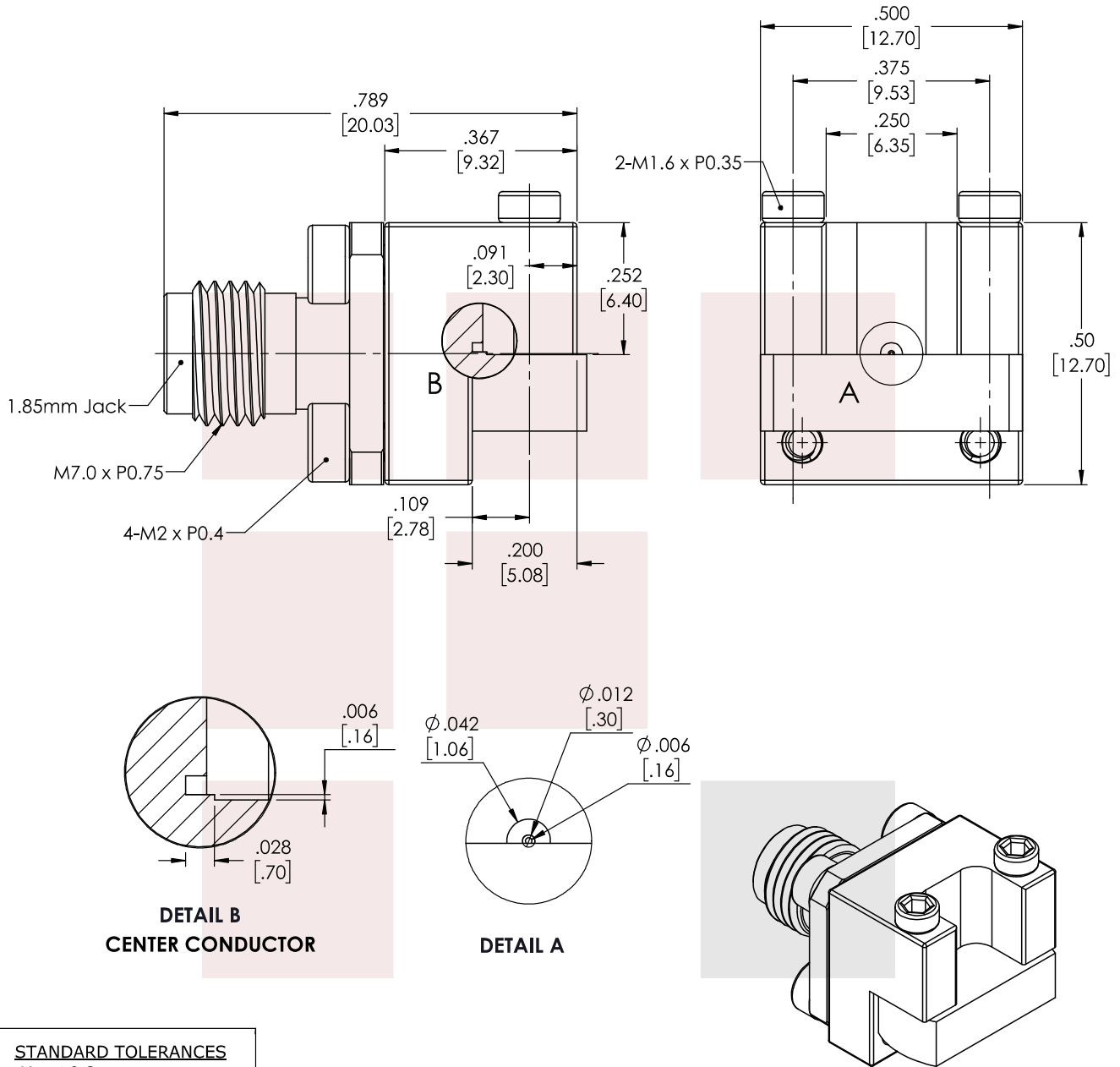
1.85mm Female PCB Connector End Launch Clamp/Solder (Captive Contact) Attachment Removable End Launch, Standard Profile from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [1.85mm Female PCB Connector End Launch Clamp/Solder \(Captive Contact\) Attachment Removable End Launch, Standard Profile FMCN1520](#)

URL: <https://www.fairviewmicrowave.com/1.85mm-female-end-launch-pcb-connector-fmcn1520-p.aspx>

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STANDARD TOLERANCES

.X ± 0.2
 .XX ± 0.01
 .XXX ± 0.005

*STANDARD TOLERANCES APPLY ONLY TO DIMENSIONS IN INCHES

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NOTES:
 1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL.
 2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME.
 3. DIMENSIONS ARE IN INCHES [mm].

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DWG NO FMCN1520	CAGE CODE 3FKR5			
CAD FILE 09/12/18	SHEET	SCALE N/A	SIZE A	CN2245