

## Low PIM 4.1/9.5 Mini DIN Unequal Tapper With 20 dB Coupled Port From 350 MHz to 5.85 GHz Rated To 300 Watts

The FMTMP1014 is a 100:1 Split Ratio Tapper with 4.1/9.5 Mini DIN Female connectors rated to 300 watt CW. Insertion loss is a low 0.17 dB. The Nominal Coupling value at 698 to 960 MHz and 1,710 to 2,700 MHz is 20 dB.

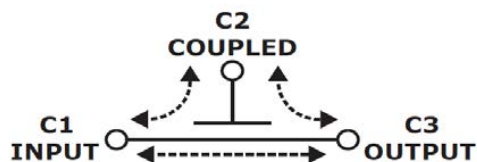
Fairview Microwave's family of Low PIM Power Tappers (Unequal Power Dividers) are designed without solder joints and a unique airline distributed capacitor construction allows for exceptional performance within the 350 to 5,850 MHz frequency range. They are offered in a range of Split Ratios to allow flexibility in the design of your DAS system. Especially designed and manufactured for the rigors of low PIM systems, this family of Tappers is rated at an average power of 300 watt CW, and have PIM performance of -160 dBc or better. They can be used indoor or outdoor as they meet the moisture requirements of IP67. They are available in four different connector types: N, DIN 7-16, 4.3-10, and Mini DIN 4.1/9.5.

### Electrical Specifications

| Description                                                                | Min  | Typ   | Max  | Units  |
|----------------------------------------------------------------------------|------|-------|------|--------|
| Frequency Range                                                            | 0.35 |       | 5.85 | GHz    |
| Split Ratio                                                                |      | 100:1 |      |        |
| Impedance                                                                  |      | 50    |      | Ohms   |
| Coupling                                                                   |      | 20    |      | dB     |
| Coupling (C1 - C2)                                                         |      | 20    |      | dB     |
| Coupling (C1 - C3)                                                         |      | 0.1   |      | dB     |
| Insertion Loss                                                             |      |       | 0.17 | dB     |
| Passive Intermodulation<br>2 tones at 43 dBm, F1 = 1930 MHz, F2 = 1990 MHz |      |       | -160 | dBc    |
| Input Power (CW)                                                           |      |       | 300  | Watts  |
| Input Power (Peak)                                                         |      |       | 3    | KWatts |

### Performance by Frequency

| Description         | F1        | F2         | F3          | F4        | F5          | Units |
|---------------------|-----------|------------|-------------|-----------|-------------|-------|
| Frequency Range     | 350 - 520 | 698 - 960  | 1710 - 2700 | 3500-4500 | 4900 - 5850 | MHz   |
| Coupling (Tested)   |           | 20.2 ± 0.6 | 20.9 ± 1.2  |           |             | dB    |
| Typical Coupling    | 20.2      |            |             | 19.5      | 27.6        | dB    |
| Maximum Return Loss |           | -23.1      | -23.1       |           |             | dB    |
| Typical Return Loss | -20.8     |            |             | -20.8     | -20.8       | dB    |



Electrical Specification Notes:  
Not designed for use in the 1,500 to 1,690 MHz frequency range.



### Features:

- 100:1 Split (20 dB Coupling)
- Low PIM (-160 dBc)
- 300 watt CW Rating
- 350 to 5,850 MHz
- VSWR 1.25
- 4.1/9.5 Mini DIN Female Connector
- Mounting Bracket

### Applications:

- Indoor/Outdoor Use (IP67)
- Base Station
- 4G/LTE/AWS/PCS/PMR/UMTS/TETRA/WiFi/WiMAX
- Distributed Antenna Systems (DAS)
- Wireless Infrastructure

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## Mechanical Specifications

### Size

Length 4 in [101.6 mm]  
Width 1 in [25.4 mm]  
Height 2.11 in [53.59 mm]

Weight 0.722 lbs [327.49 g]

Housing Material and Plating Aluminum, Chem Film

### Configuration

Package Type Connectorized  
Input Connector 4.1/9.5 Mini DIN Female  
Output Connector 4.1/9.5 Mini DIN Female  
Coupled Connector 4.1/9.5 Mini DIN Female

## Environmental Specifications

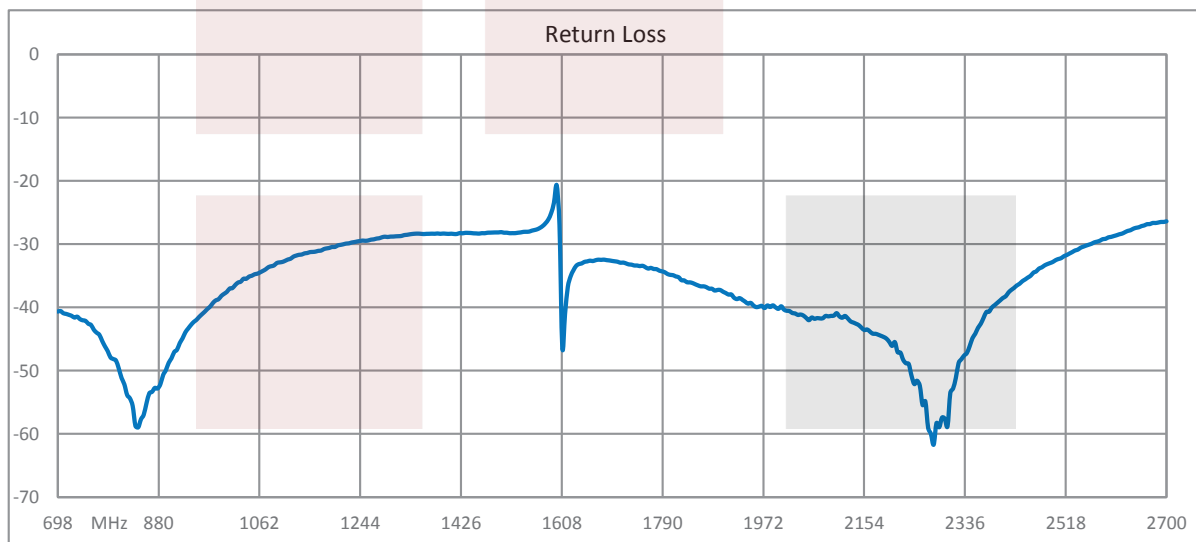
Humidity IP67

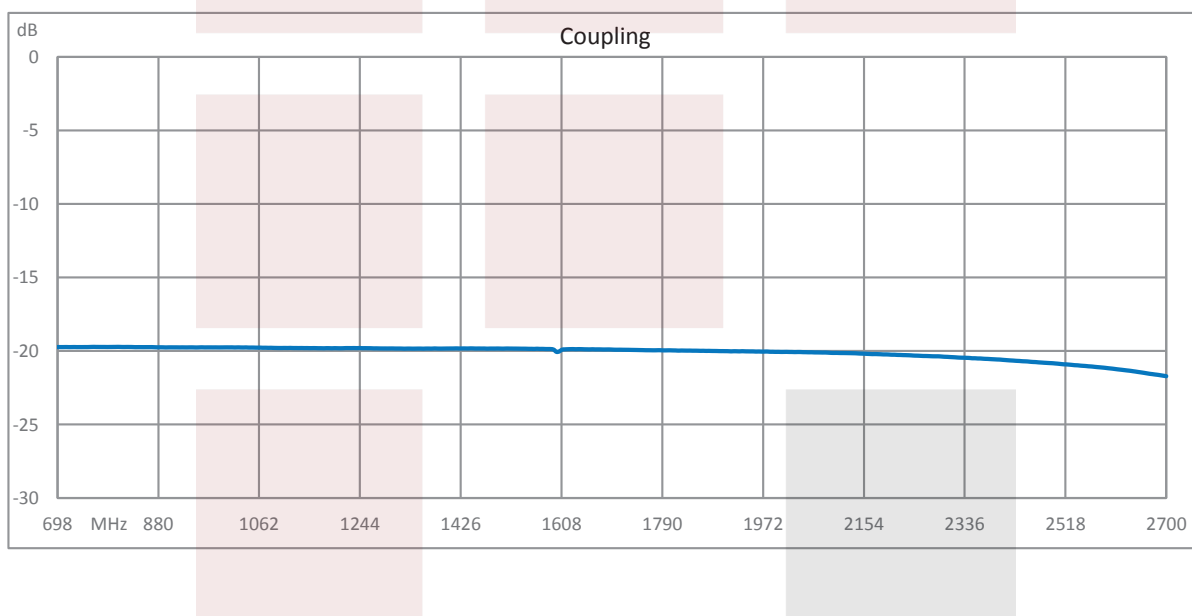
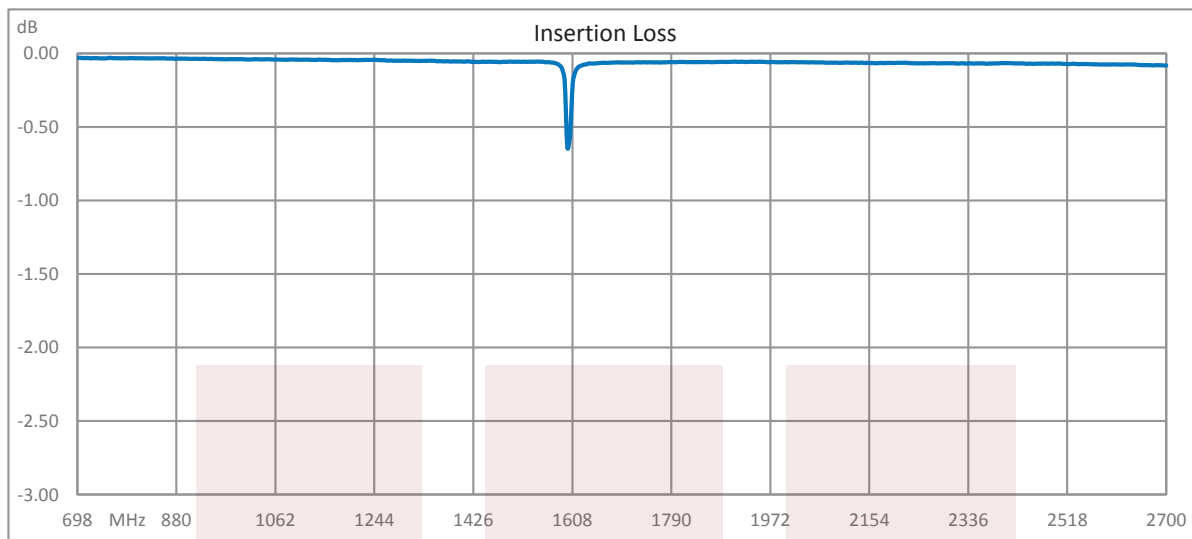
## Compliance Certifications (see [product page](#) for current document)

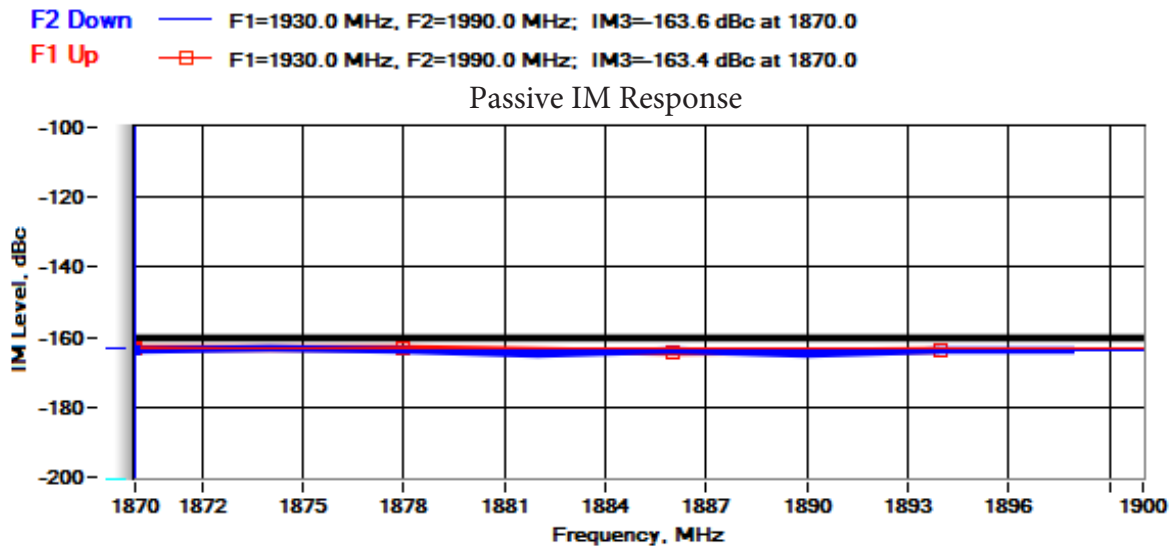
## Plotted and Other Data

Notes:

### Typical Performance Data





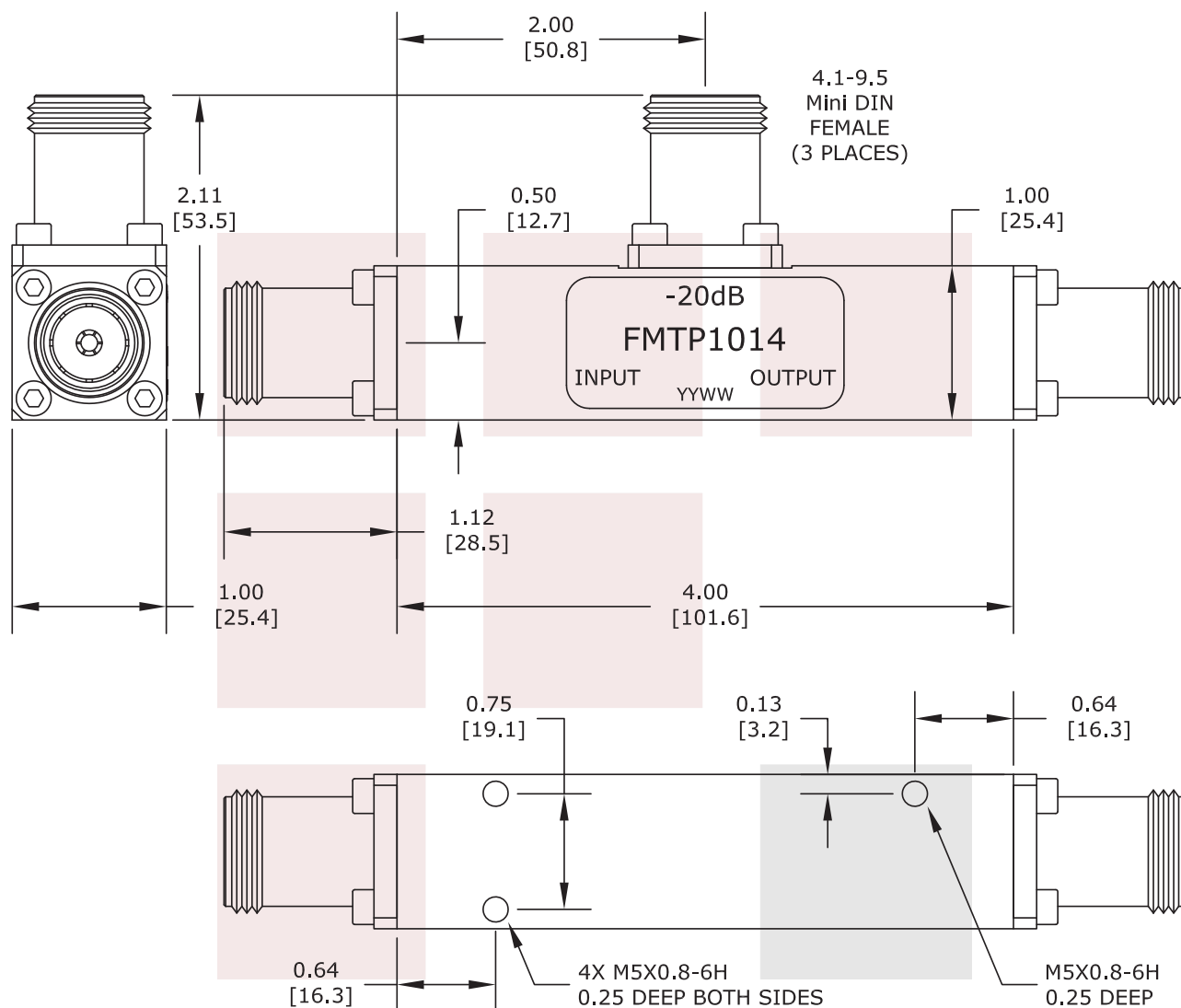


Low PIM 4.1/9.5 Mini DIN Unequal Tapper With 20 dB Coupled Port From 350 MHz to 5.85 GHz Rated To 300 Watts from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [Low PIM 4.1/9.5 Mini DIN Unequal Tapper With 20 dB Coupled Port From 350 MHz to 5.85 GHz Rated To 300 Watts FMTP1014](https://www.fairviewmicrowave.com/low-pim-4.1-9.5-mini-din-unequal-tapper-20-db-5.85-ghz-fmtp1014-p.aspx)

URL: <https://www.fairviewmicrowave.com/low-pim-4.1-9.5-mini-din-unequal-tapper-20-db-5.85-ghz-fmtp1014-p.aspx>

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TOLERANCES:  
HOLE TOLERANCE: X.XXX ±.003  
LENGTH TOLERANCE: X.XXX ±.010  
LENGTH TOLERANCE: X.XX ±.03

## FAIRVIEW MICROWAVE INC.

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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].

### TITLE

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Coupled Port From 350 MHz to 5.85 GHz Rated To 300  
Watts

### DWG NO

FMTP1014

### CAGE CODE

3FKR5

### CAD FILE

080516

### SHEET

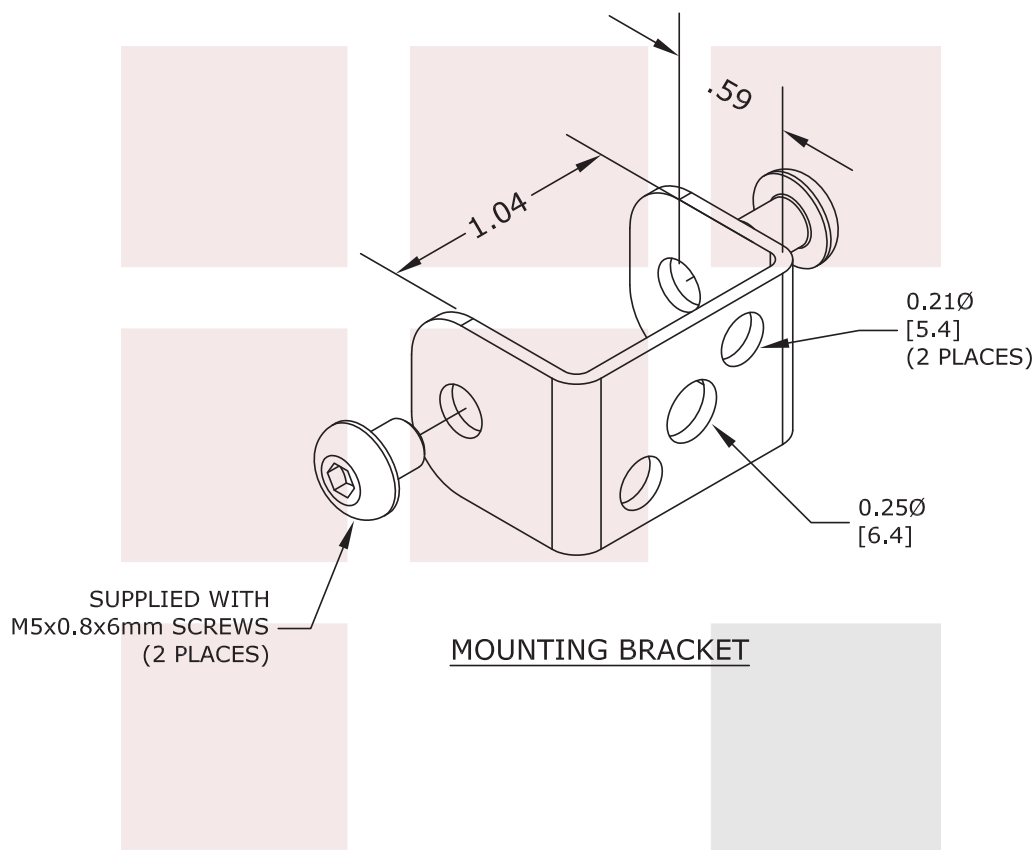
### SCALE

N/A

### SIZE

A

2233



TOLERANCES:  
HOLE TOLERANCE: X.XXX ±.003  
LENGTH TOLERANCE: X.XXX ±.010  
LENGTH TOLERANCE: X.XX ±.03

|                                                                                                                            |                    |                                                                                                                                                                                     |                    |           |      |
|----------------------------------------------------------------------------------------------------------------------------|--------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|-----------|------|
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|                                                                                                                            | CAD FILE<br>080516 | SHEET                                                                                                                                                                               | SCALE<br>N/A       | SIZE<br>A | 2233 |