

|               |                             |                               |             |
|---------------|-----------------------------|-------------------------------|-------------|
| Customer Name | STANDARD                    | FUJITSU MEDIA DEVICES LIMITED |             |
| System        | AMPS/CDMA/TDMA SAW Duplexer | DATE                          | Mar.26.2003 |
| FMD P/N       | FAR-D5CM-881M50-D1G1        | Version 2.0b                  |             |
| Customer P/N  |                             | Reference No.                 |             |

**Table 1 Electrical Specification**

|                       |                  | Condition    | FMD Current proposal                      |      |     | Unit |
|-----------------------|------------------|--------------|---|------|-----|------|
|                       |                  |              | Min                                       | Typ. | Max |      |
| Tx<br>to<br>ANT       | Insertion loss   | 824-849MHz   | -   | 2.0  | 2.5 | dB   |
|                       | Pass band ripple | 824-849MHz   | -   | 0.8  | 1.3 | dB   |
|                       | Pass band VSWR   | 824-849MHz   | -   | 2.0  | 2.2 | -    |
|                       | Input Power      | 824-849 MHz  | 1.2 W >50000 Hours<br>CW tone (Ta=+50 °C) |      |     | Watt |
|                       | Attenuation      | 779-804MHz   | 20  | 30   | -   | dB   |
|                       |                  | 869-894MHz   | 40  | 43   | -   | dB   |
|                       |                  | 1648-1698MHz | 35  | 40   | -   | dB   |
| 2472-2547MHz          |                  | 13           | 15  | -    | dB  |      |
| ANT<br>to<br>Rx       | Insertion loss   | 869-894MHz   | -   | 2.5  | 3.3 | dB   |
|                       | Pass band ripple | 869-894MHz   | -   | 1.0  | 1.5 | dB   |
|                       | Pass band VSWR   | 869-894MHz   | -   | 2.0  | 2.3 | -    |
|                       | Attenuation      | 824-849MHz   | 50  | 53   | -   | dB   |
|                       |                  | 930-1200MHz  | 35  | 38   | -   | dB   |
| 1200-1800MHz          |                  | 35           | 38  | -    | dB  |      |
| Tx<br>to<br>Rx        | Isolation        | 824-849 MHz  | 54  | 57   |     | dB   |
|                       |                  | 869-894 MHz  | 45  | 47   | -   | dB   |
| Storage Temperature   |                  |              | -40 to +100                               |      |     | °C   |
| Operating Temperature |                  |              | -30 to +85                                |      |     | °C   |
| Package size          | Length           | -            | 5.0                                       | 5.2  | mm  |      |
|                       | Width            | -            | 5.0                                       | 5.2  | mm  |      |
|                       | Height           | -            | 1.5                                       | 1.7  | mm  |      |

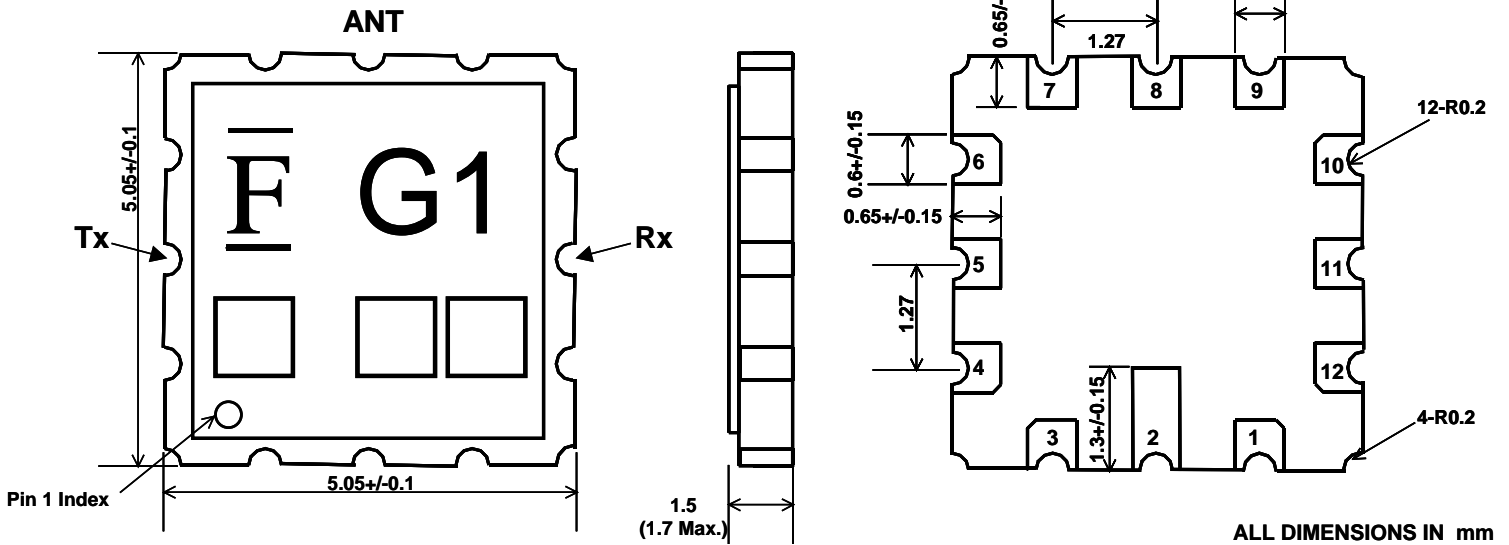
|               |                             |                               |             |
|---------------|-----------------------------|-------------------------------|-------------|
| Customer Name | STANDARD                    | FUJITSU MEDIA DEVICES LIMITED |             |
| System        | AMPS/CDMA/TDMA SAW Duplexer | DATE                          | Mar.26.2003 |
| FMD P/N       | FAR-D5CM-881M50-D1G1        | Version 2.0b                  |             |
| Customer P/N  |                             | Reference No.                 |             |

**Dimensions and Pin assignment**

**TOP VIEW**

**SIDE VIEW**

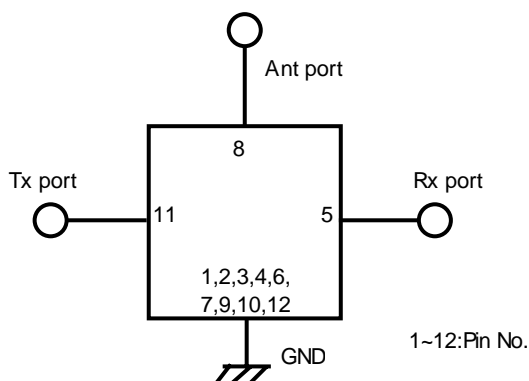
**BOTTOM VIEW**



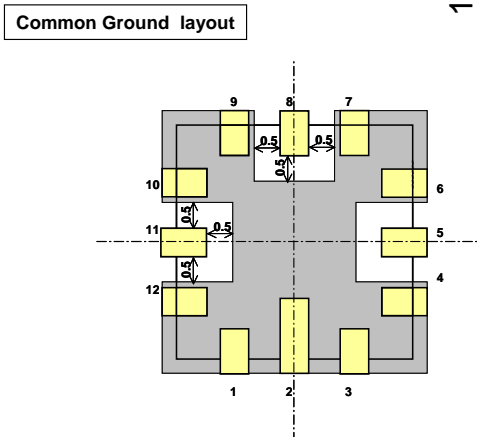
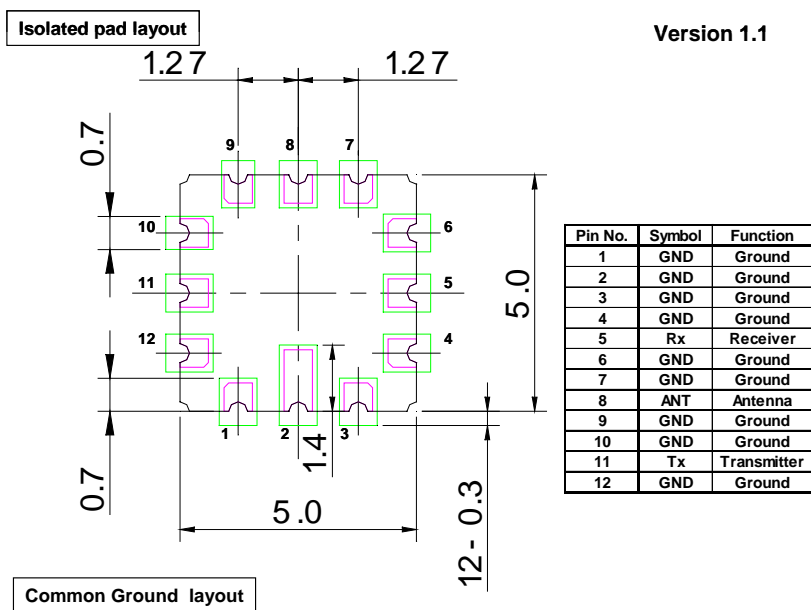
| Pin No. | Pin name | Description     |
|---------|----------|-----------------|
| 1       | GND      | Ground Pin      |
| 2       | GND      | Ground Pin      |
| 3       | GND      | Ground Pin      |
| 4       | GND      | Ground Pin      |
| 5       | Rx       | Receiver Pin    |
| 6       | GND      | Ground Pin      |
| 7       | GND      | Ground Pin      |
| 8       | ANT      | Antenna Pin     |
| 9       | GND      | Ground Pin      |
| 10      | GND      | Ground Pin      |
| 11      | Tx       | Transmitter Pin |
| 12      | GND      | Ground Pin      |

|               |                             |                               |             |
|---------------|-----------------------------|-------------------------------|-------------|
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| FMD P/N       | FAR-D5CM-881M50-D1G1        | Version 2.0b                  |             |
| Customer P/N  |                             | Reference No.                 |             |

**Evaluation Circuit**



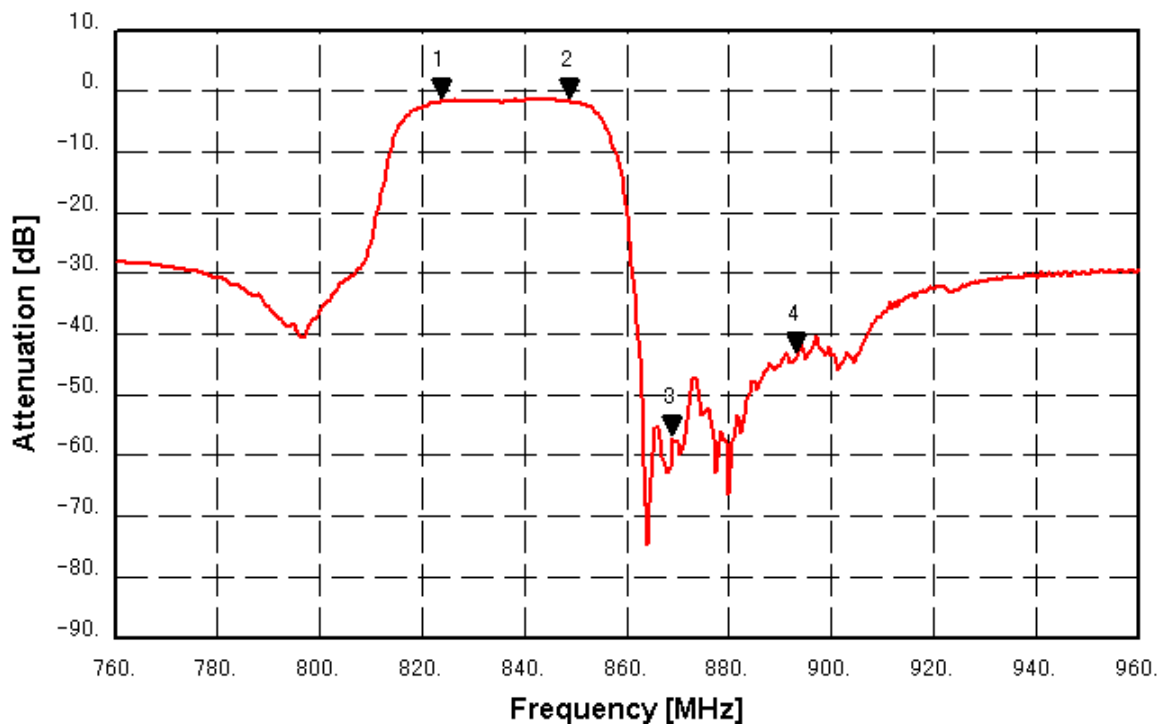
**Recommended foot print pattern**



All Dimension in mm

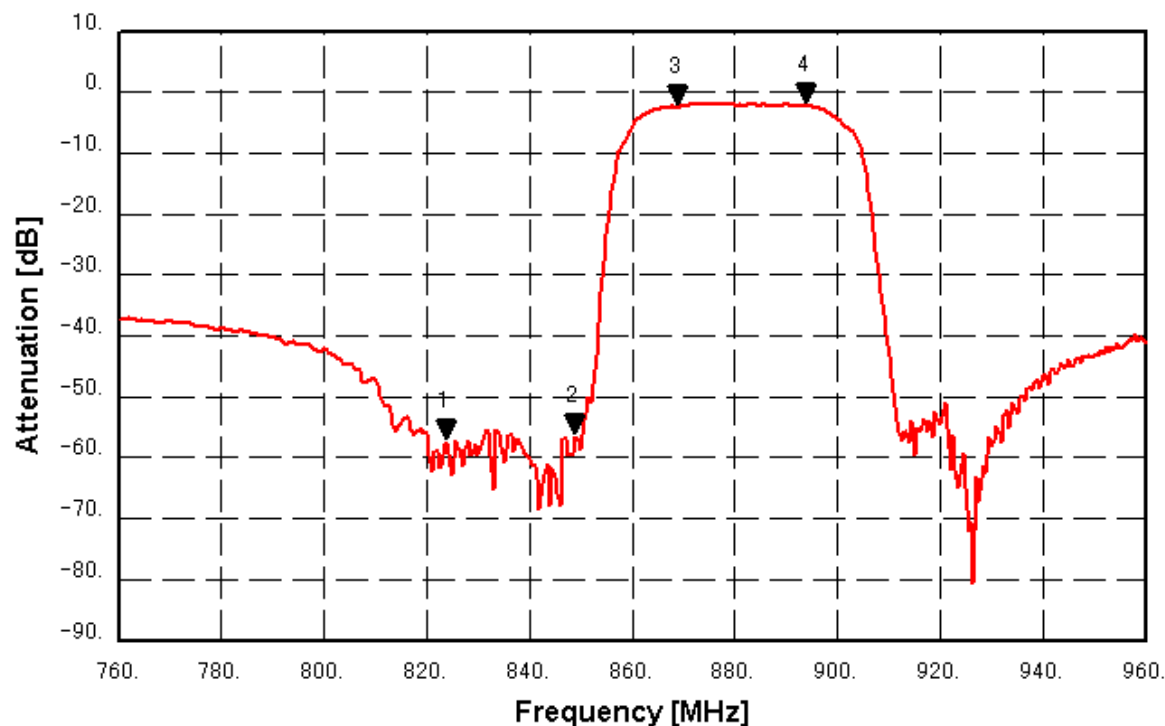
|               |                             |                               |             |
|---------------|-----------------------------|-------------------------------|-------------|
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| Customer P/N  |                             | Reference No.                 |             |

## Tx to Ant



|          |           |             |
|----------|-----------|-------------|
| Marker 1 | 824.00MHz | 0 -1.81dB,  |
| Marker 2 | 849.00MHz | 0 -1.83dB,  |
| Marker 3 | 869.00MHz | 0 -57.26dB, |
| Marker 4 | 894.00MHz | 0 -43.58dB, |

## Ant to Rx

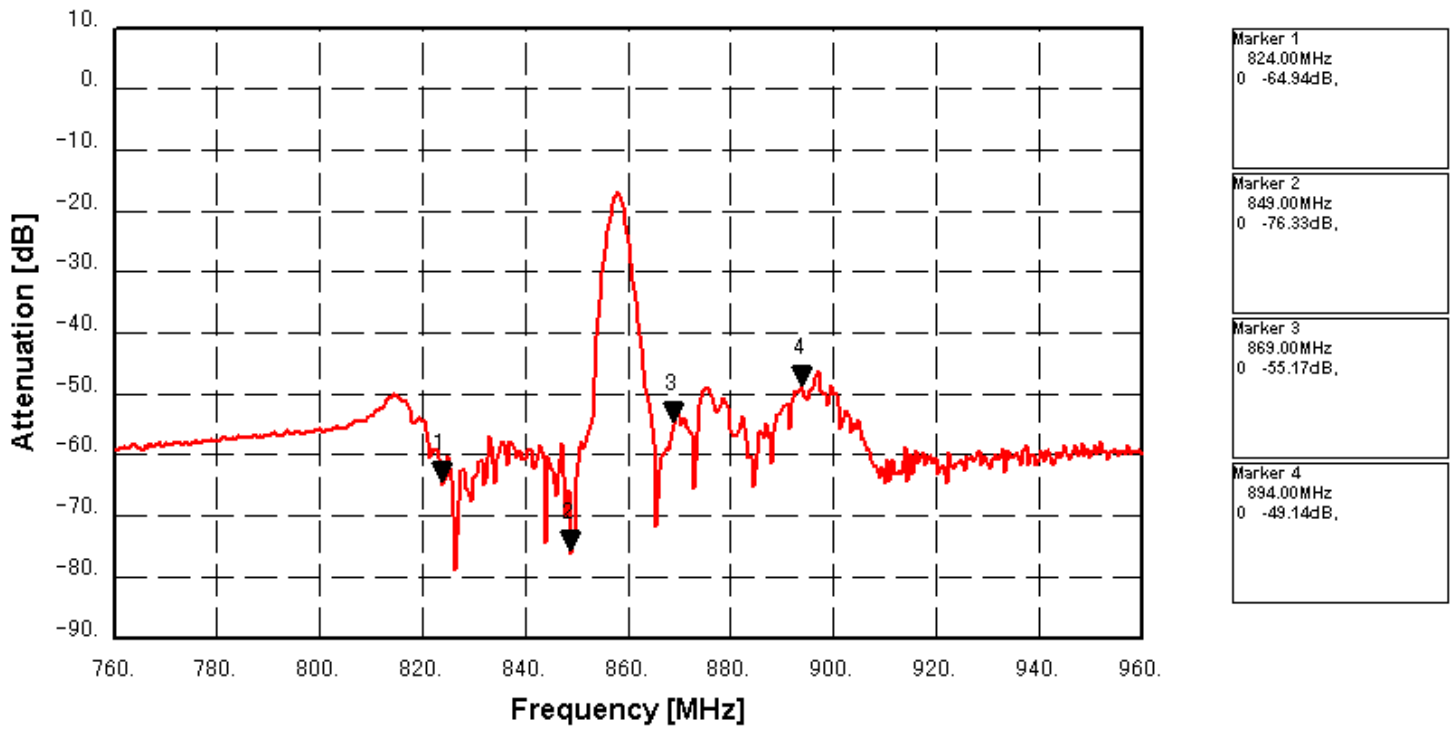


|          |           |             |
|----------|-----------|-------------|
| Marker 1 | 824.00MHz | 0 -57.60dB, |
| Marker 2 | 849.00MHz | 0 -56.68dB, |
| Marker 3 | 869.00MHz | 0 -2.53dB,  |
| Marker 4 | 894.00MHz | 0 -2.31dB,  |

**Figure 1-1 Electrical Characteristics**

|               |                             |                               |             |
|---------------|-----------------------------|-------------------------------|-------------|
| Customer Name | STANDARD                    | FUJITSU MEDIA DEVICES LIMITED |             |
| System        | AMPS/CDMA/TDMA SAW Duplexer | DATE                          | Mar.26.2003 |
| FMD P/N       | FAR-D5CM-881M50-D1G1        | Version 2.0b                  |             |
| Customer P/N  |                             | Reference No.                 |             |

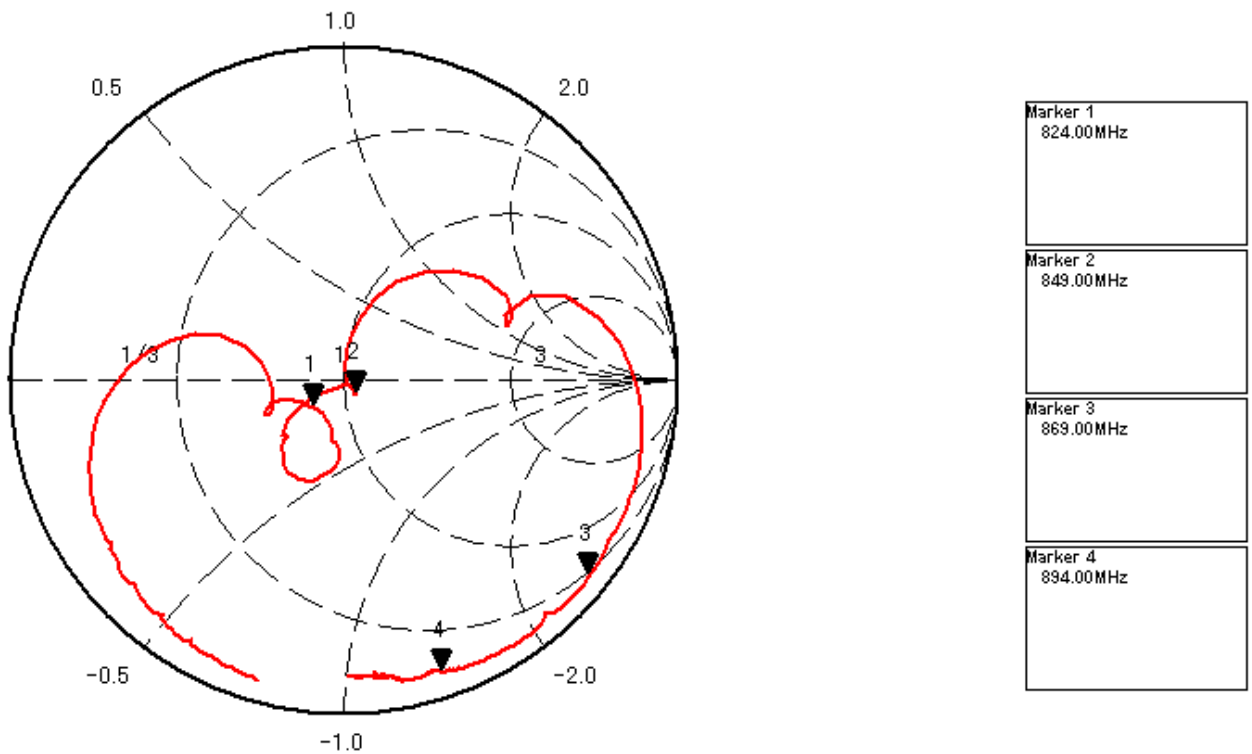
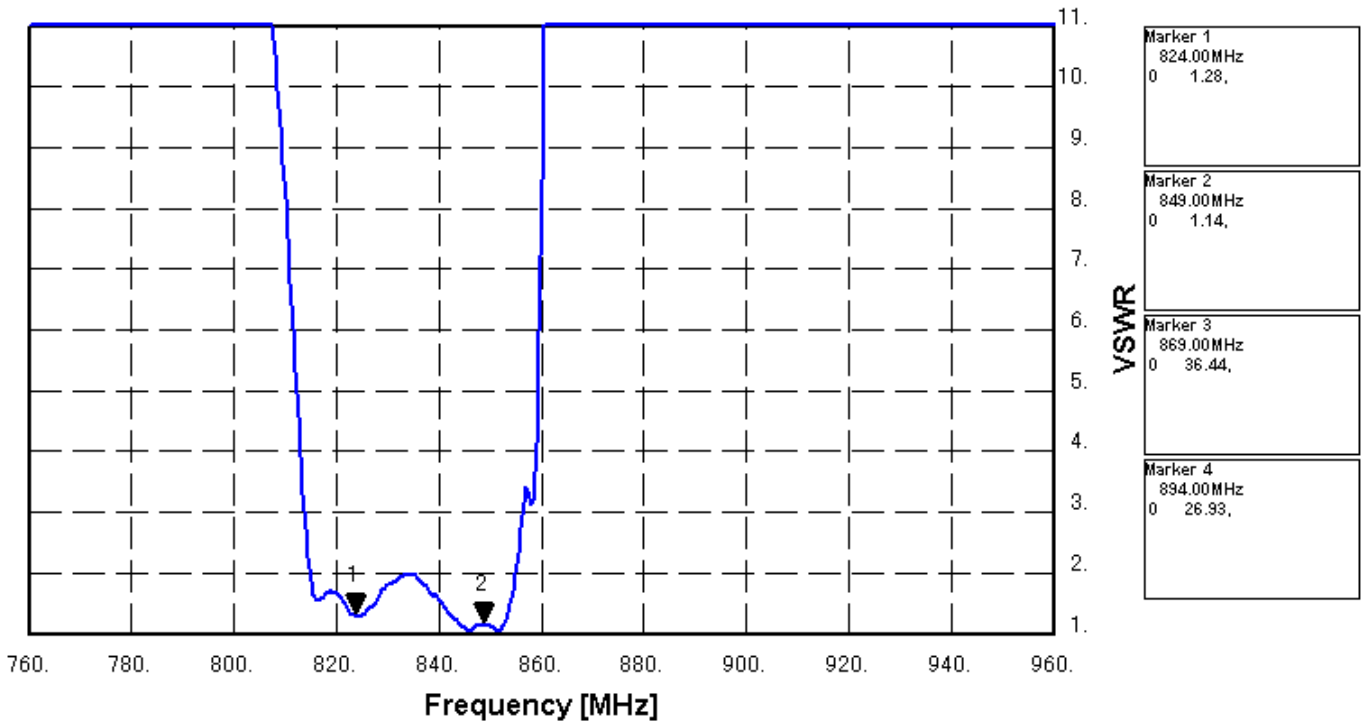
## Tx to Rx Isolation



**Figure 1-2 Electrical Characteristics**

|               |                             |                               |             |
|---------------|-----------------------------|-------------------------------|-------------|
| Customer Name | STANDARD                    | FUJITSU MEDIA DEVICES LIMITED |             |
| System        | AMPS/CDMA/TDMA SAW Duplexer | DATE                          | Mar.26.2003 |
| FMD P/N       | FAR-D5CM-881M50-D1G1        | Version 2.0b                  |             |
| Customer P/N  |                             | Reference No.                 |             |

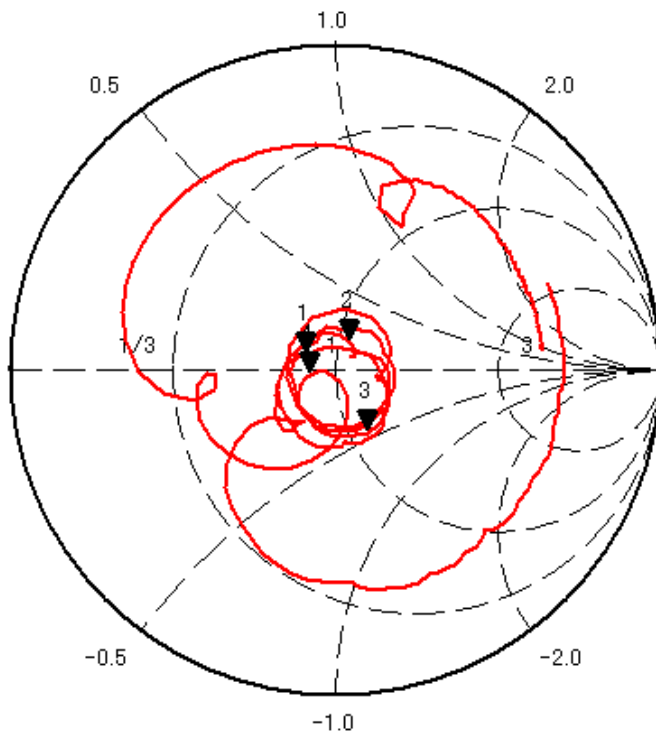
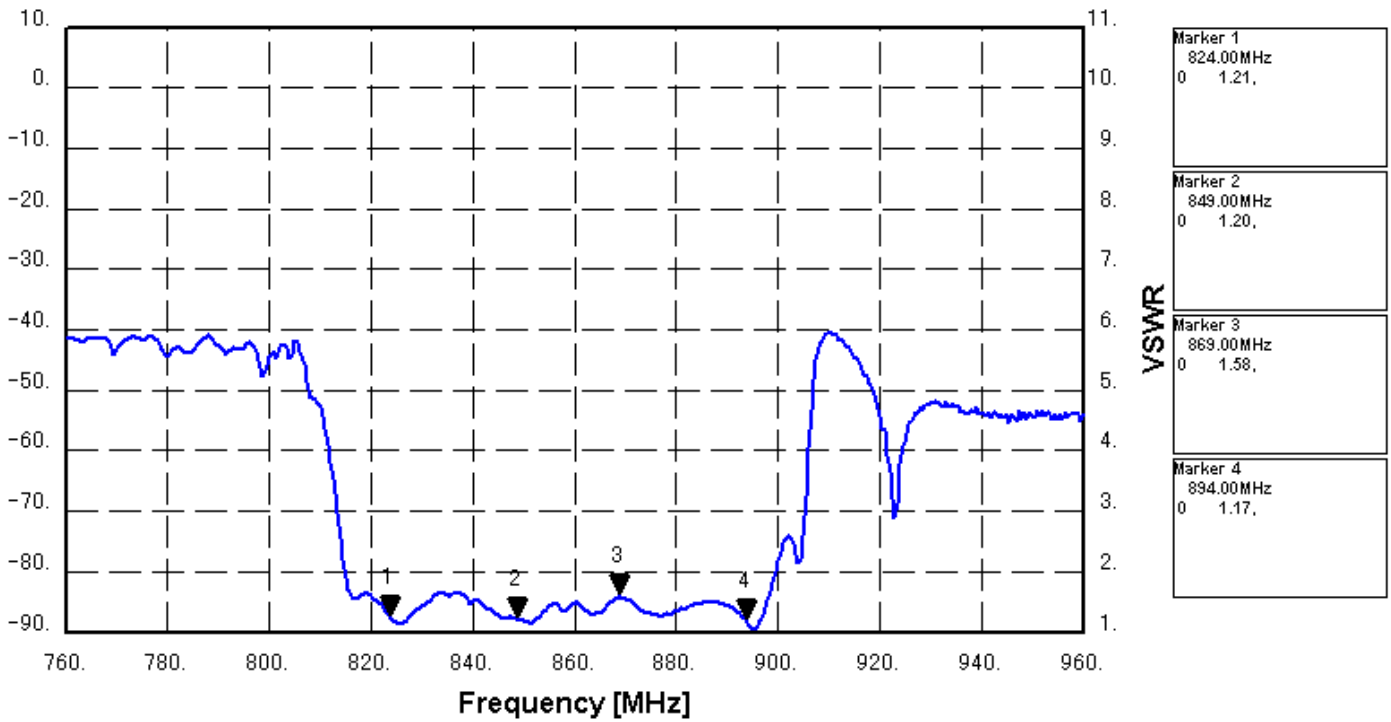
## Tx Port



**Figure 1-3 Electrical Characteristics**

|               |                             |                               |             |
|---------------|-----------------------------|-------------------------------|-------------|
| Customer Name | STANDARD                    | FUJITSU MEDIA DEVICES LIMITED |             |
| System        | AMPS/CDMA/TDMA SAW Duplexer | DATE                          | Mar.26.2003 |
| FMD P/N       | FAR-D5CM-881M50-D1G1        | Version 2.0b                  |             |
| Customer P/N  |                             | Reference No.                 |             |

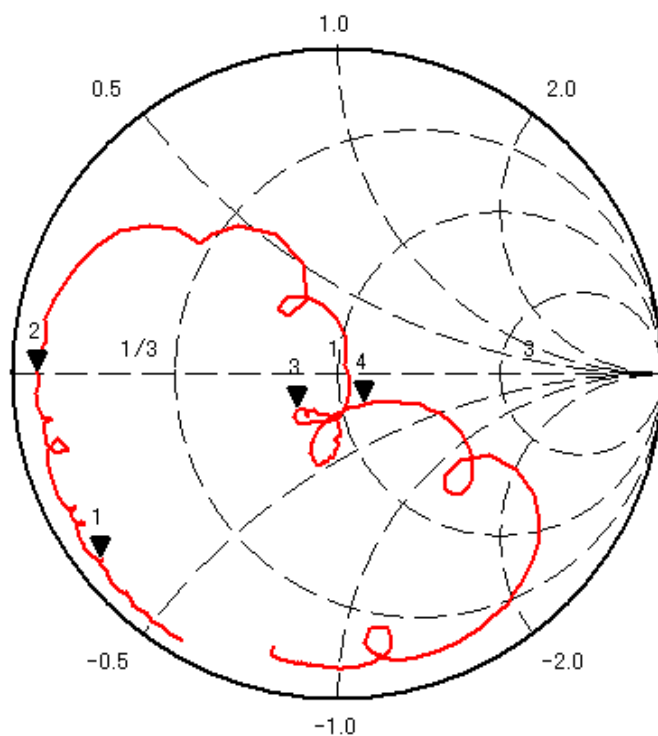
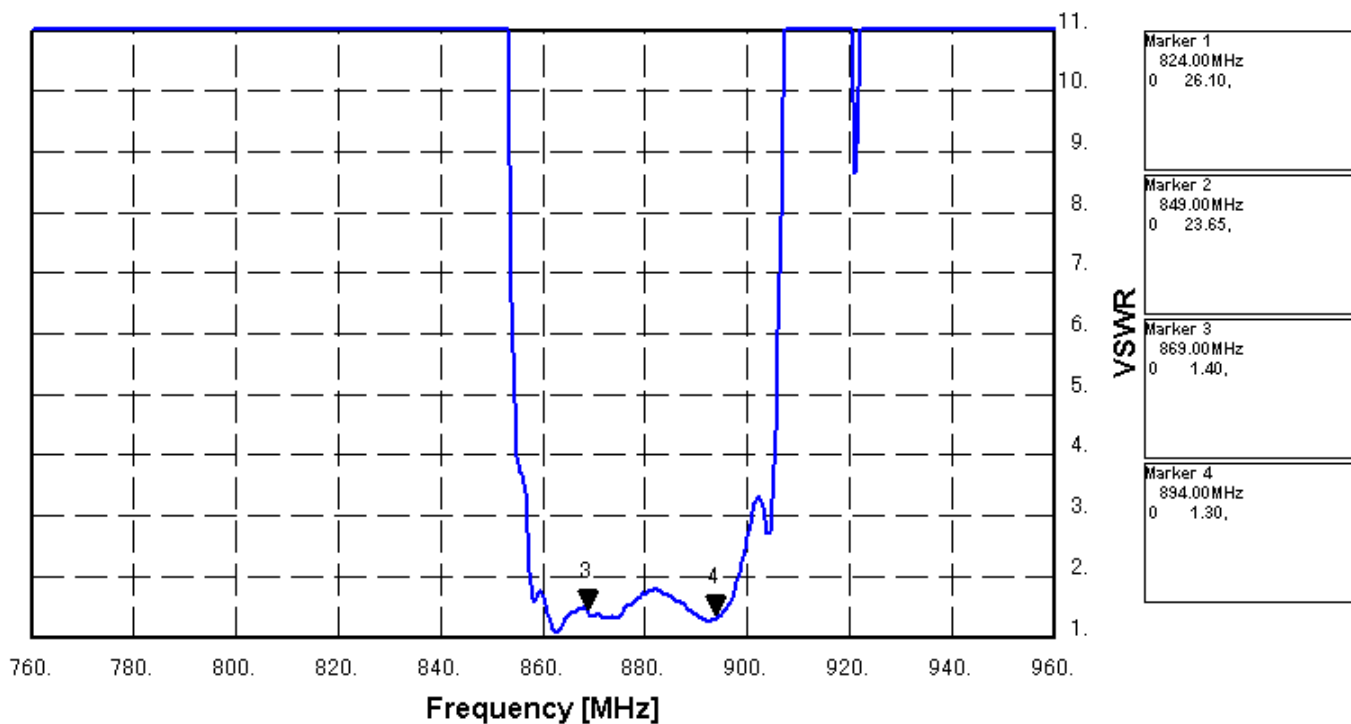
## Ant Port



**Figure 1-4 Electrical Characteristics**

|               |                             |                               |             |
|---------------|-----------------------------|-------------------------------|-------------|
| Customer Name | STANDARD                    | FUJITSU MEDIA DEVICES LIMITED |             |
| System        | AMPS/CDMA/TDMA SAW Duplexer | DATE                          | Mar.26.2003 |
| FMD P/N       | FAR-D5CM-881M50-D1G1        | Version 2.0b                  |             |
| Customer P/N  |                             | Reference No.                 |             |

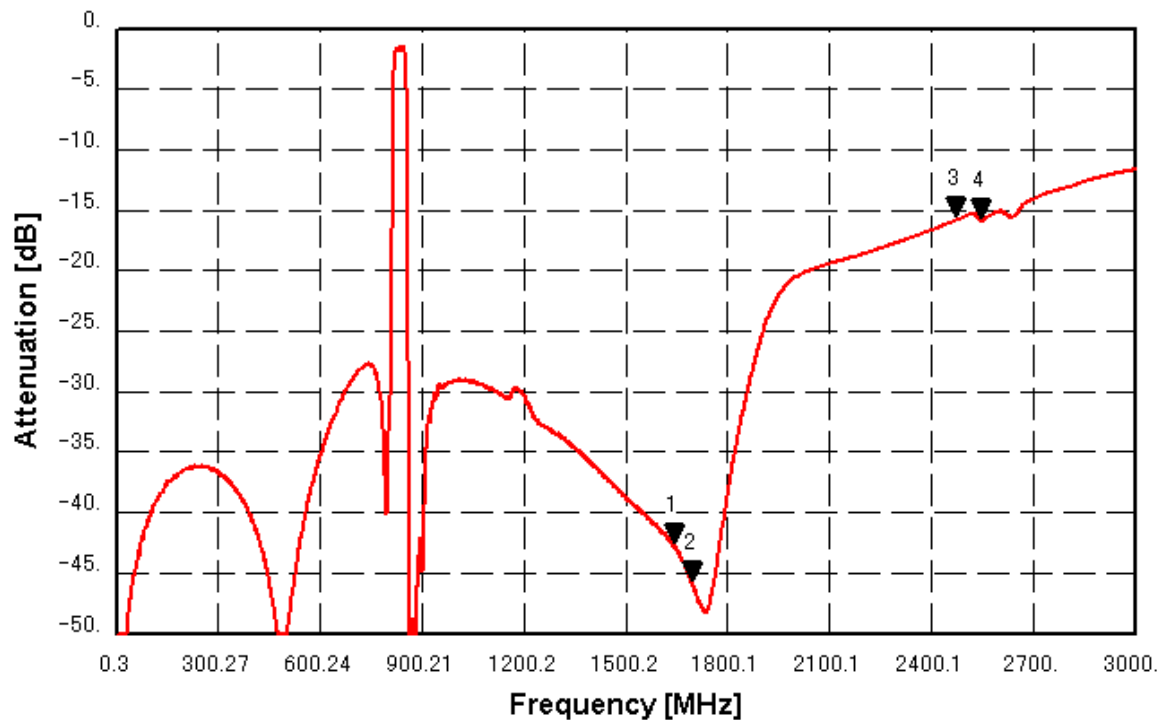
## Rx Port



**Figure 1-5 Electrical Characteristics**

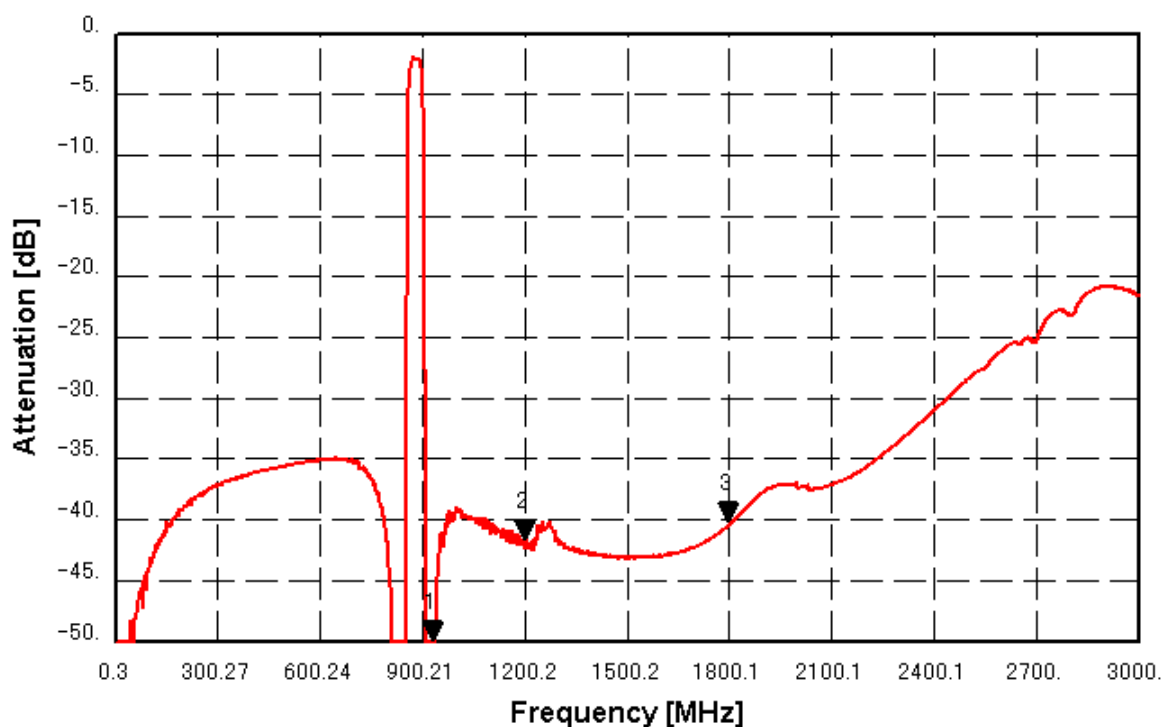
|               |                             |                               |             |
|---------------|-----------------------------|-------------------------------|-------------|
| Customer Name | STANDARD                    | FUJITSU MEDIA DEVICES LIMITED |             |
| System        | AMPS/CDMA/TDMA SAW Duplexer | DATE                          | Mar.26.2003 |
| FMD P/N       | FAR-D5CM-881M50-D1G1        | Version 2.0b                  |             |
| Customer P/N  |                             | Reference No.                 |             |

## Tx to Ant



|          |            |             |
|----------|------------|-------------|
| Marker 1 | 1648.00MHz | 0 -42.88dB, |
| Marker 2 | 1698.00MHz | 0 -45.98dB, |
| Marker 3 | 2472.00MHz | 0 -15.85dB, |
| Marker 4 | 2547.00MHz | 0 -15.89dB, |

## Ant to Rx



|          |            |             |
|----------|------------|-------------|
| Marker 1 | 930.00MHz  | 0 -60.36dB, |
| Marker 2 | 1200.00MHz | 0 -41.88dB, |
| Marker 3 | 1800.00MHz | 0 -40.43dB, |

**Figure 1-6 Electrical Characteristics**