



\* Pb Free Part



MSL1

|               |                               |                                        |                |
|---------------|-------------------------------|----------------------------------------|----------------|
| Customer Name | Standard Specification        | TAIYO YUDEN Mobile Technology Co.,Ltd. |                |
| System        | W-CDMA V (850) Tx (100/50ohm) | Date                                   | March 31, 2010 |
| Part Number   | FAR-F5KB-836M50-B4ER          | Version 2.0d                           |                |

**Table 1.Electrical specifications**

| Passband: 824 ~ 849 MHz                                                    |                    |                             |           |      |      |         |
|----------------------------------------------------------------------------|--------------------|-----------------------------|-----------|------|------|---------|
| Item                                                                       | Condition<br>(MHz) | Specification               |           |      | Unit | Remarks |
|                                                                            |                    | Min.                        | Typ.      | Max. |      |         |
| Insertion Loss                                                             | 824~849            | -                           | 1.7       | 2.5  | dB   |         |
| Ripple                                                                     | 824~849            | -                           | 0.5       | 1.4  | dB   |         |
| Absolute attenuation                                                       | DC~779             | 40                          | 73        | -    | dB   |         |
|                                                                            | 779~804            | 40                          | 69        | -    | dB   |         |
|                                                                            | 869~894            | 38                          | 44        | -    | dB   |         |
|                                                                            | 894~6000           | 30                          | 47        | -    | dB   |         |
| VSWR (Input)                                                               | 824~849            | -                           | 1.6       | 2.0  | -    |         |
| VSWR (Output)                                                              | 824~849            | -                           | 1.6       | 2.0  | -    |         |
| Amplitude balance<br>( S <sub>21</sub> /S <sub>31</sub>  )                 | 824~849            | -1.0                        | -0.1/+0.1 | +1.0 | dB   |         |
| Phase balance<br>(( $\phi$ S <sub>21</sub> - $\phi$ S <sub>31</sub> )+180) | 824~849            | -10                         | -1/+1     | +10  | deg. |         |
| Input Impedance                                                            | Balanced           | 100                         |           |      | Ohm  |         |
| Output Impedance                                                           | Unbalance          | 50                          |           |      | Ohm  |         |
| Input Power                                                                | 824~849            | -                           | -         | +13  | dBm  |         |
| Operating Temperature                                                      |                    | -30 ~ +85                   |           |      | °C   |         |
| Device size                                                                |                    | 1.4typ. x 1.0typ. x 0.5Max. |           |      | mm   |         |



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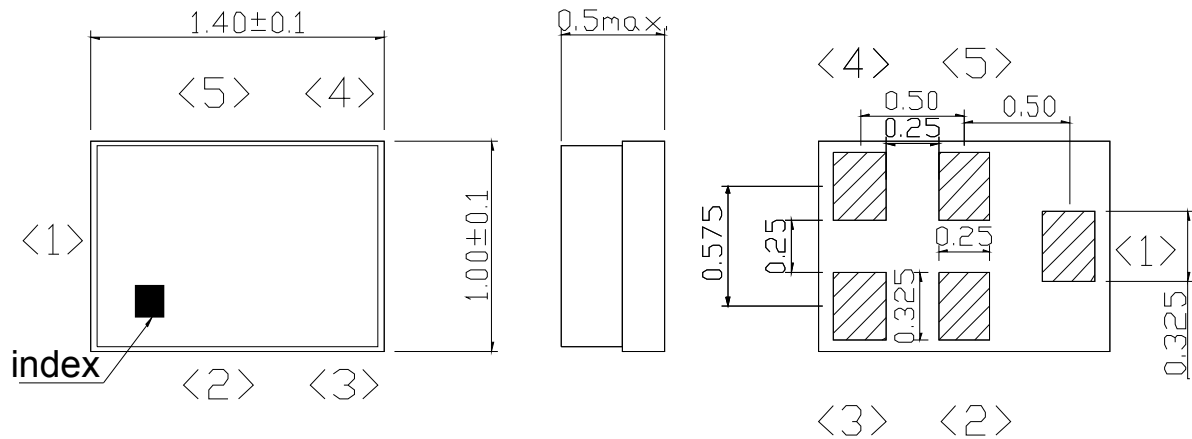


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## Dimensions

Device size: 1.4typ. x 1.0typ. x 0.5max

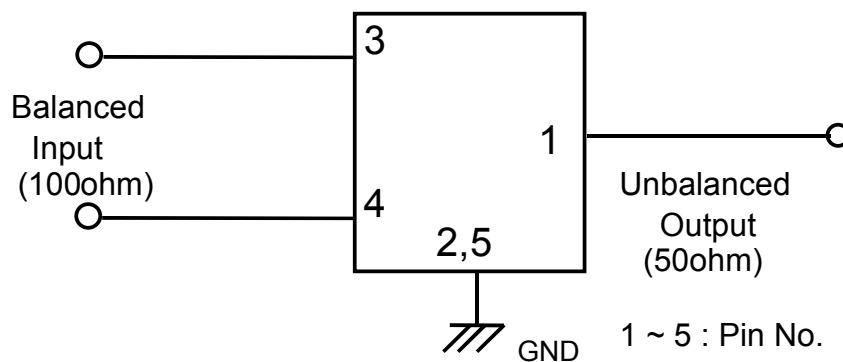


Unit : mm

## Pin Configuration

| Pin No. | Symbol | Function       |
|---------|--------|----------------|
| 1       | OUT    | Unbalanced pin |
| 2       | GND    | Ground         |
| 3       | IN     | Balanced pin   |
| 4       | IN     | Balanced pin   |
| 5       | GND    | Ground         |

## Test Condition





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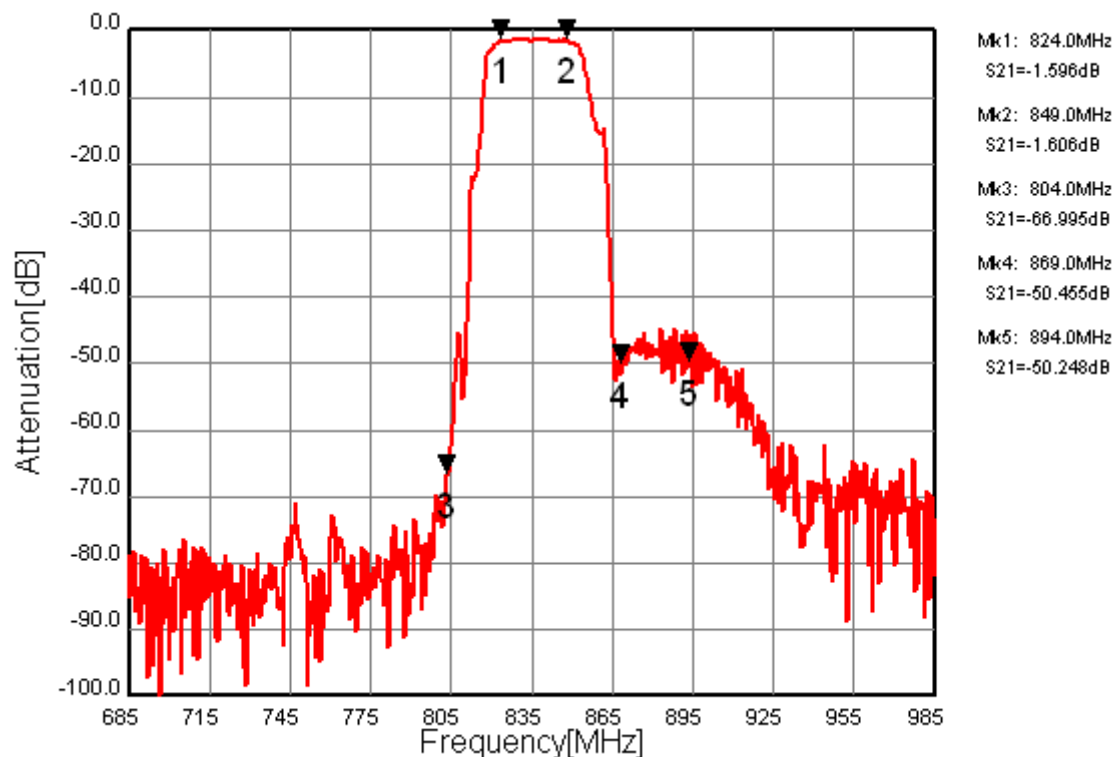


Fig.1 Pass-band Characteristics

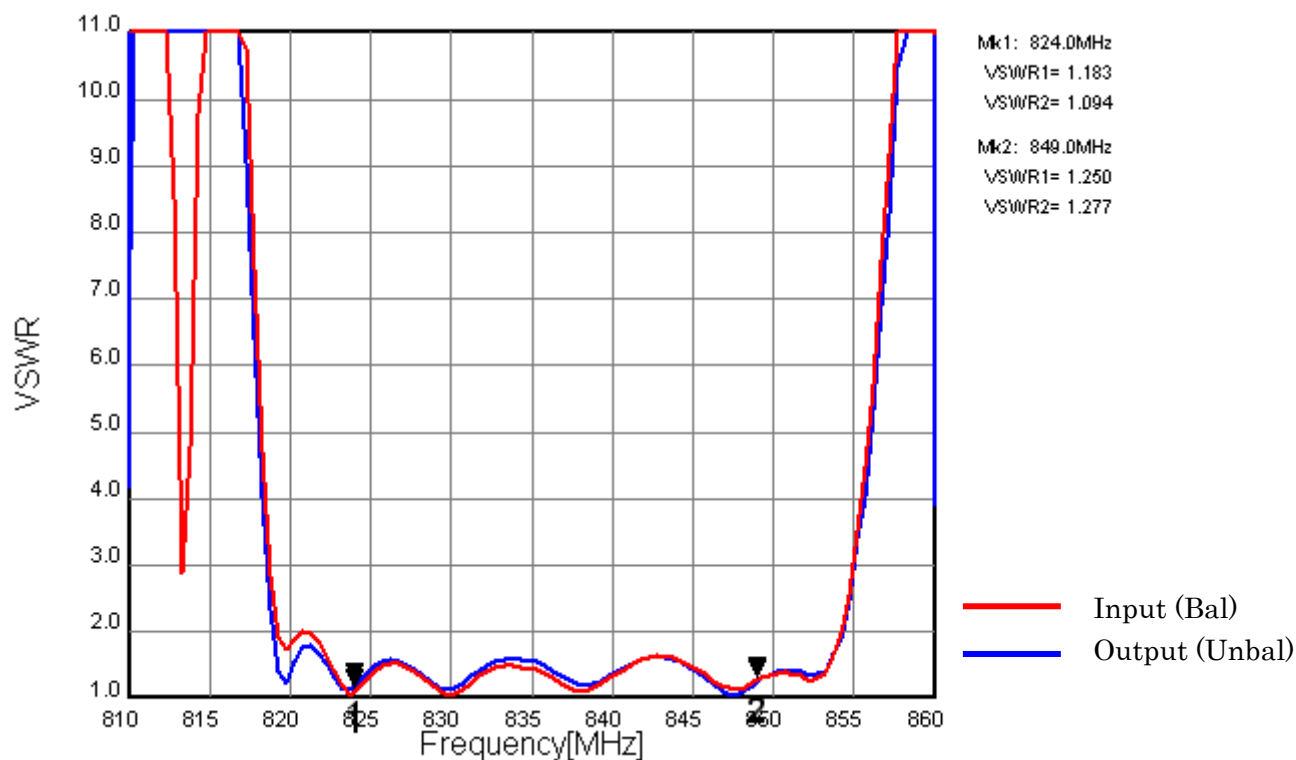


Fig.2 VSWR

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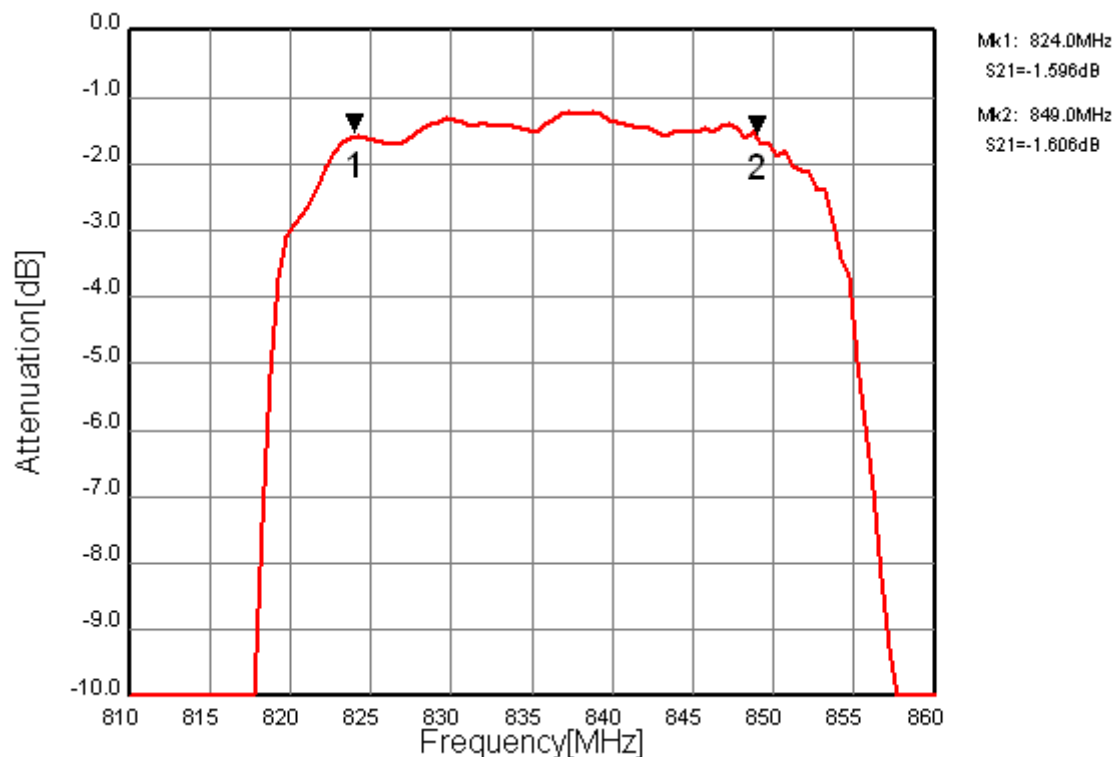


Fig.3 In-band Characteristics

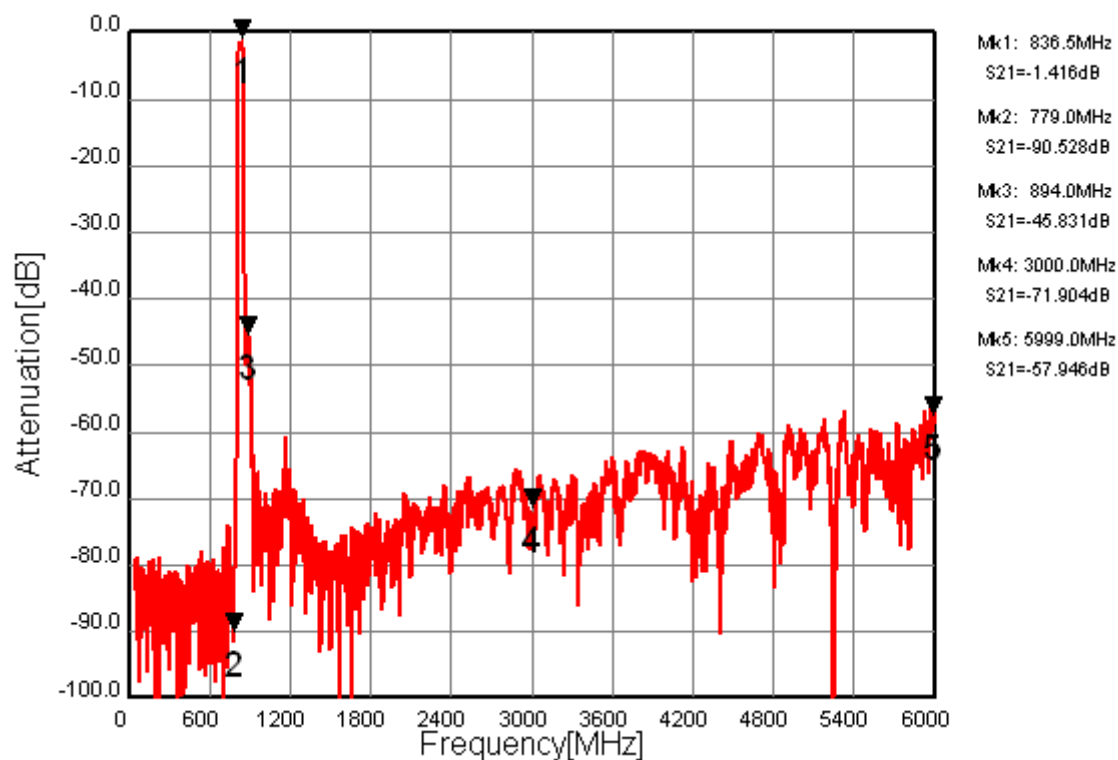


Fig.4 Wide-band Characteristics



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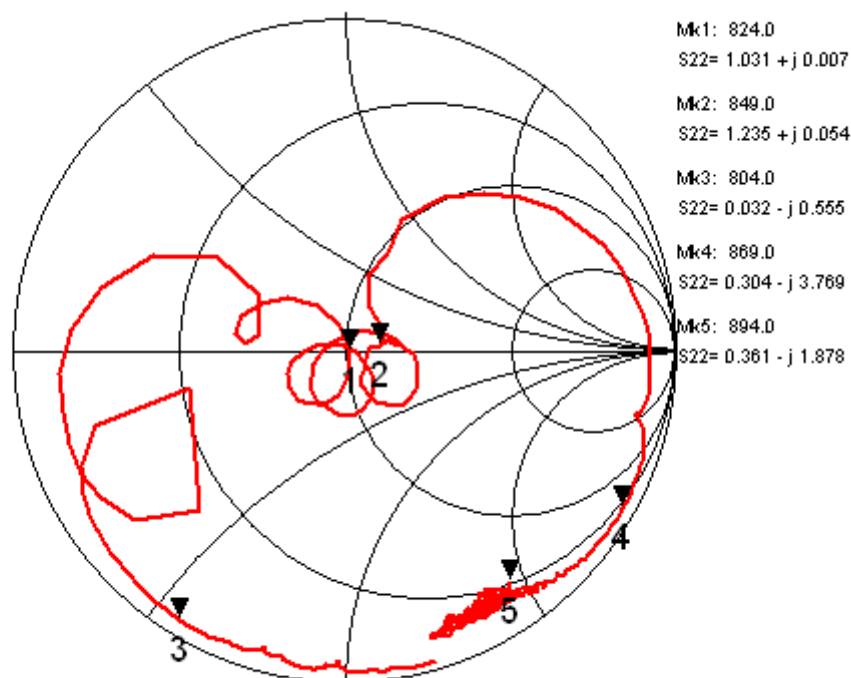


Fig.5 Input Impedance (Balance)

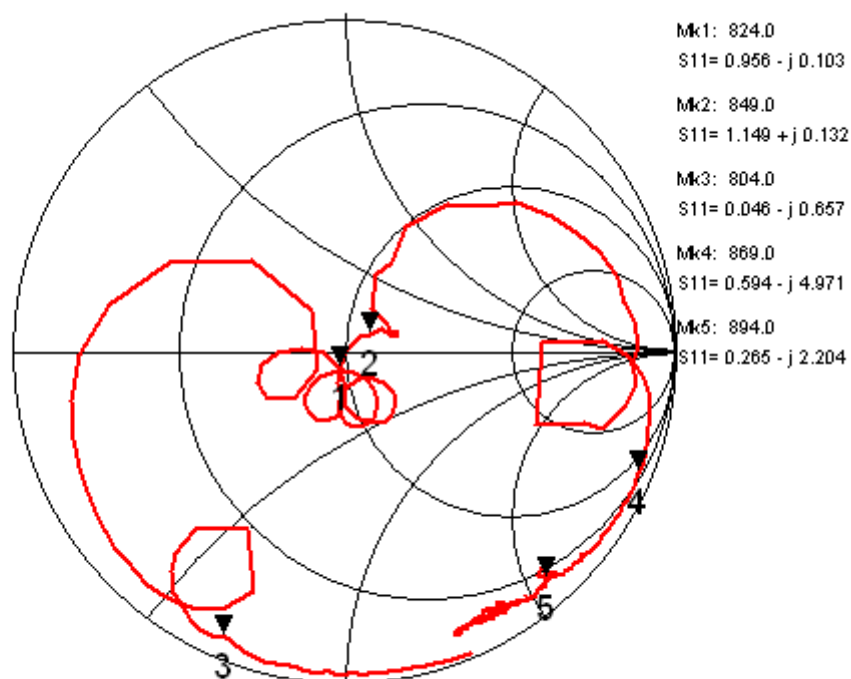


Fig.6 Output Impedance (Unbalance)

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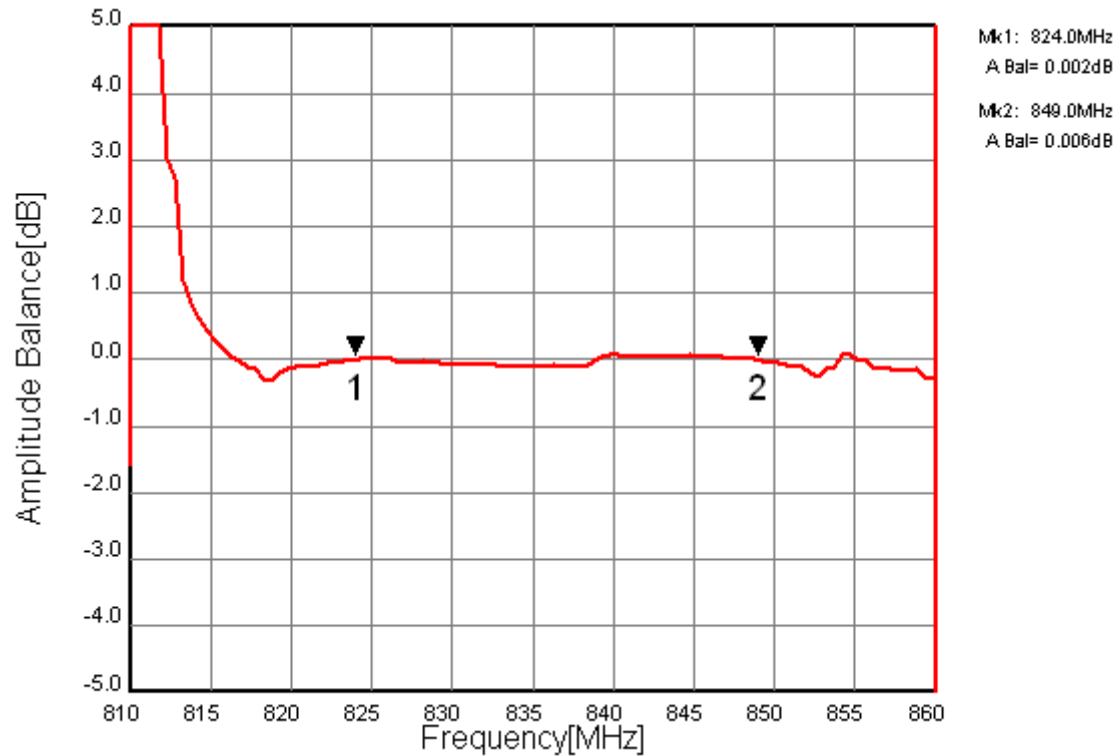


Fig.7 Amplitude Balance

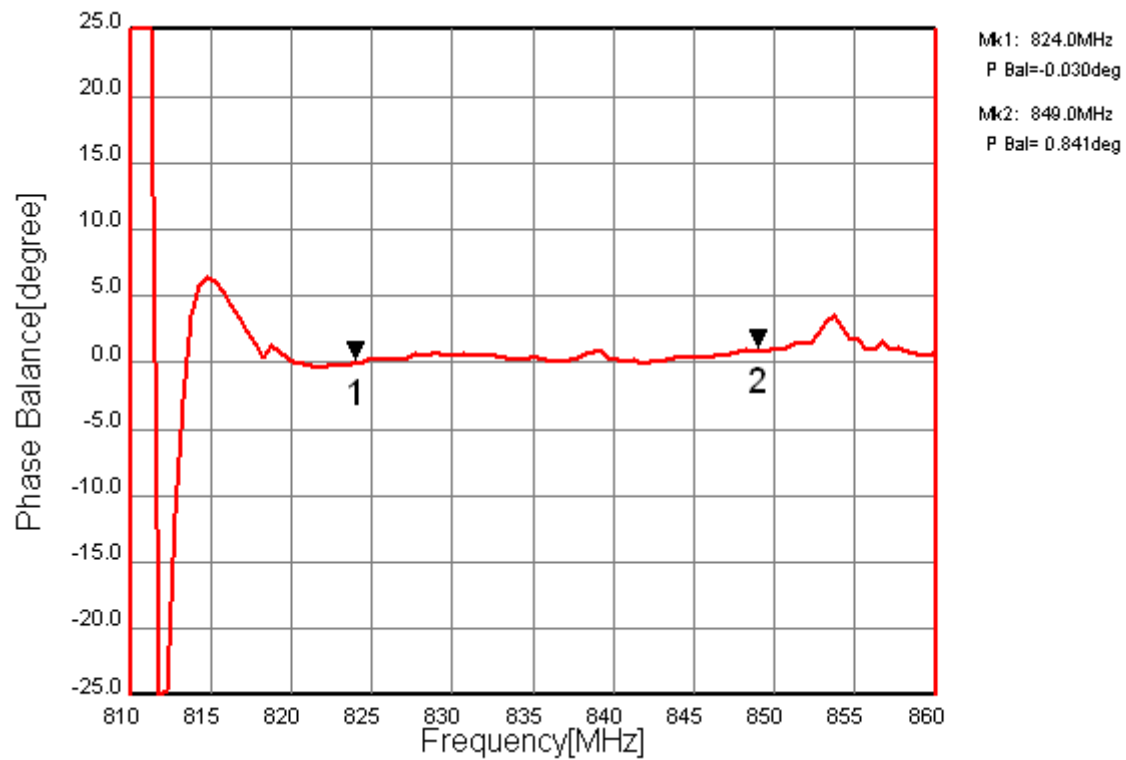


Fig.8 Phase Balance

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