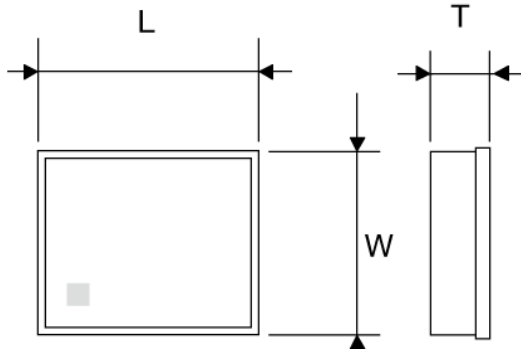


SAW Filter

F6QG2G140P2KA



■ Features

- Item Summary
W-CDMA / LTE / CDMA , Rx, 403
- Lifecycle Stage
Mass Production
- Standard packaging quantity (minimum)
Taping Embossed 5000 , 15000pcs

■ Products characteristics table

| | |
|--------------------------|--------------------|
| Temperature Range | -30 to +85°C |
| Band(3GPP) | B1 / B4 |
| Band(3GPP2) | BC6 |
| Use | WCDMA / CDMA / LTE |
| Transmitting / Receiving | Rx Filter |
| Insertion Loss | 1.7dB |
| Attenuation | 55dB |
| RoHS Compliance | Yes |
| Halogen Free | Yes |
| Soldering Method | Reflow |

■ External Dimensions

| | |
|---|-----------------|
| L | 1.1mm +0.1:-0.1 |
| W | 0.9mm +0.1:-0.1 |
| T | 0.5mm max |

2015.06.03

The data is reference only. Electrical characteristics vary depending on environment or measurement condition.
 TAIYO YUDEN reserves the right to make change to the Date at any time without notice.
 Before making final selection, please check product specification.



MSL1

*Pb Free part

| | | | |
|---------------|-------------------------------|--|---------------|
| Customer Name | Standard specification | TAIYO YUDEN Mobile Technology Co.,Ltd. | |
| System | W-CDMA I & IV Rx | DATE | Nov. 17, 2011 |
| Part Number | F6QG2G140P2KA | Version 1.1a | Final |

Table 1 Electrical Specification

| Passband: 2110 - 2170MHz | | | | | | |
|--|-----------------|-----------------------------|------------|------|-------|---------|
| Parameter | Condition (MHz) | Specification | | | Unit | Remarks |
| | | Min. | Typ. | Max. | | |
| Insertion Loss | 2110 - 2170 | - | 1.7 | 2.2 | dB(*) | |
| | 2110 - 2155 | | | | | |
| Amplitude ripple | 2110 - 2170 | - | 0.6 | 1.5 | dB | |
| | 2110 - 2155 | | | | | |
| Input VSWR | 2110 - 2170 | - | 1.9 | 2.2 | - | |
| | 2110 - 2155 | | | | | |
| Output VSWR | 2110 - 2170 | - | 1.9 | 2.2 | - | |
| | 2110 - 2155 | | | | | |
| Attenuation | 10 - 1920 | 40 | 48 | - | dB | |
| | 824 - 849 | 50 | 61 | - | dB | |
| | 1710 - 1755 | 45 | 54 | - | dB | |
| | 1920 - 1980 | 50 | 55 | - | dB | |
| | 2300 - 2500 | 25 | 35 | - | dB | |
| | 4220 - 4340 | 35 | 50 | - | dB | |
| Amplitude balance (S21/S31) | 2110 - 2170 | -1.5 | -0.3~ +0.8 | +1.5 | dB | |
| | 2110 - 2155 | | | | | |
| Phase balance ($(\Phi S21 - \Phi S31) + 180$) | 2110 - 2170 | -10 | -3~ +6 | +10 | deg | |
| | 2110 - 2155 | | | | | |
| Operating temperature range | | -30 ~ +85 | | | °C | |
| Input Impedance (Unbalanced) | | 50 | | | ohm | |
| Output Impedance (Balanced / differential) | | 100 | | | ohm | |
| Device size | | 1.1typ. x 0.9typ. x 0.5max. | | | mm | |

(*) Specification of insertion loss includes loss that comes from the test board. (0.15dB)



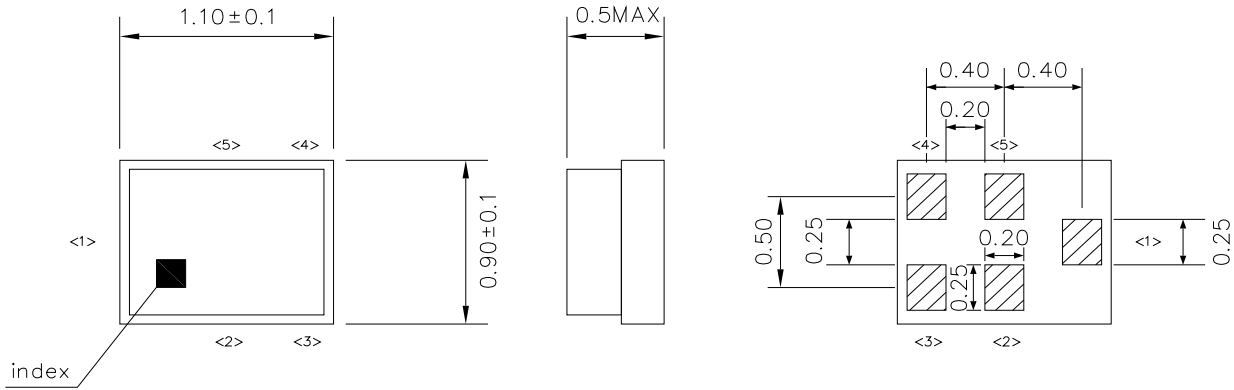
MSL1

*Pb Free part

| | | | |
|---------------|-------------------------------|---|---------------|
| Customer Name | Standard specification | TAIYO YUDEN Mobile Technology Co.,Ltd. | |
| System | W-CDMA I & IV Rx | DATE | Nov. 17, 2011 |
| Part Number | F6QG2G140P2KA | Version 1.1a | Final |

Dimensions

Device size: 1.1mmtyp. x 0.9mmtyp. x 0.5mmmax.

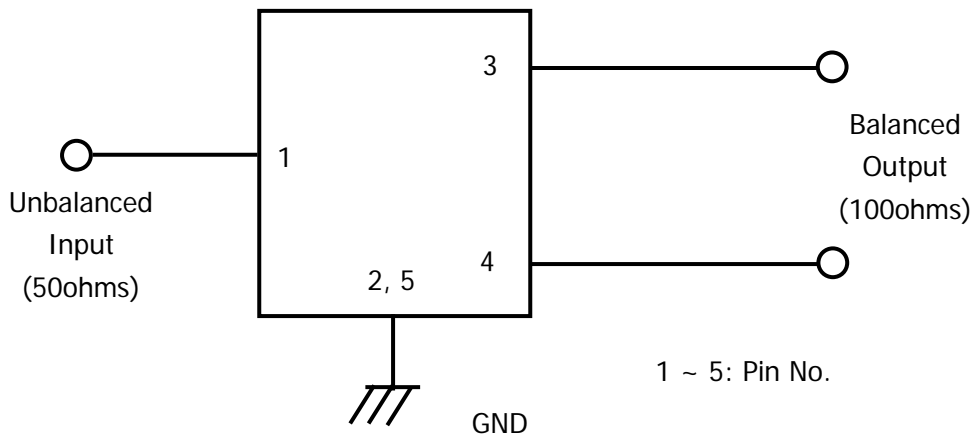


Unit: mm

Pin Configuration

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

Evaluation Circuit





MSL1

*Pb Free part

| | | | |
|---------------|------------------------|--|---------------|
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| Part Number | F6QG2G140P2KA | Version 1.1a | Final |

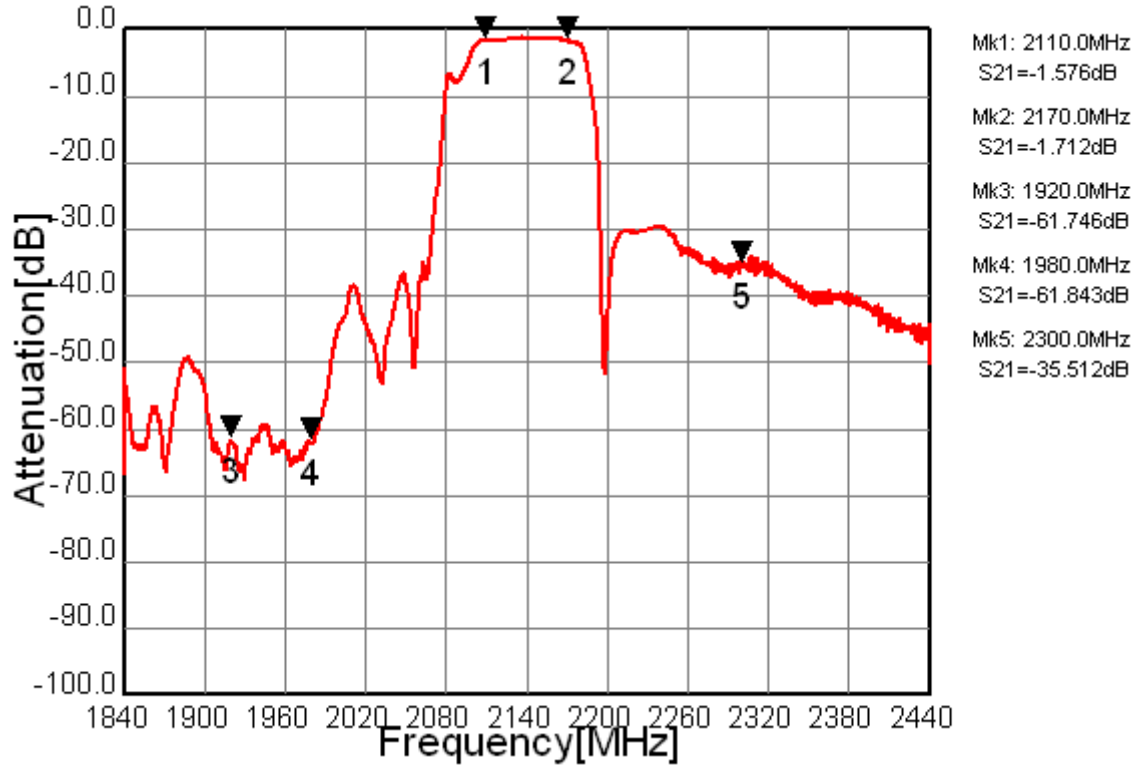


Fig.1 Pass-band Characteristic

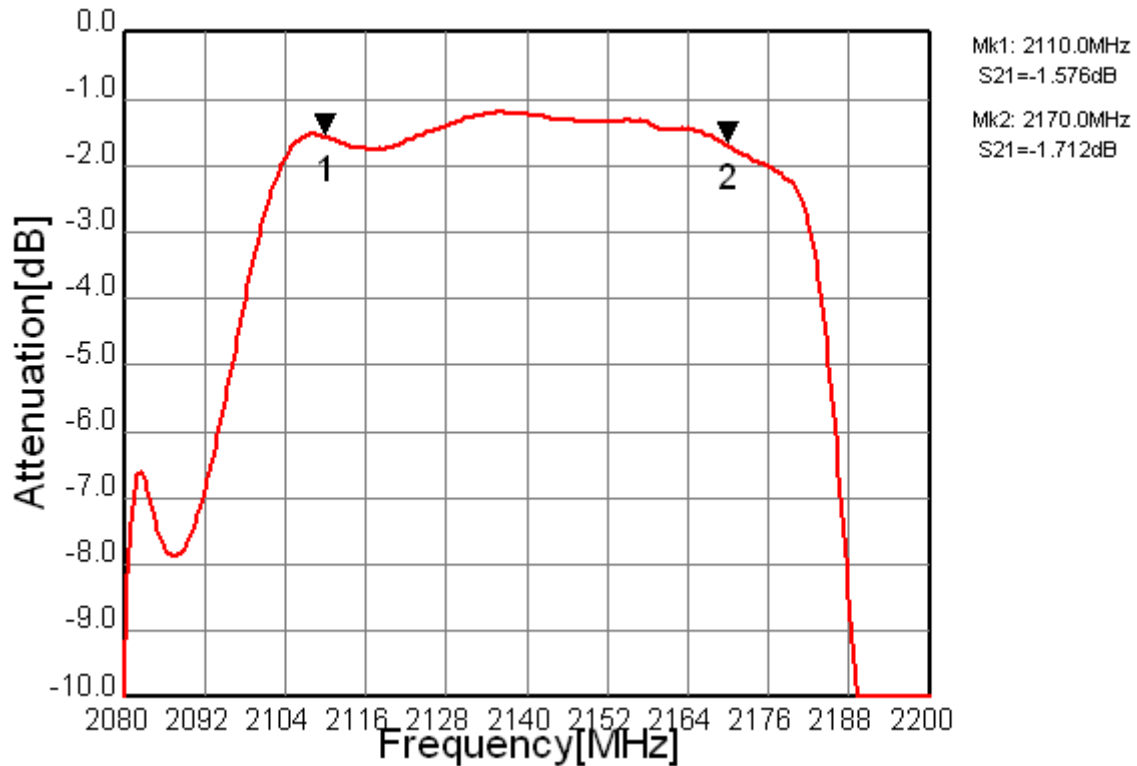


Fig.2 In-band Characteristic



MSL1

*Pb Free part

| | | | |
|---------------|------------------------|--|---------------|
| Customer Name | Standard specification | TAIYO YUDEN Mobile Technology Co.,Ltd. | |
| System | W-CDMA I & IV Rx | DATE | Nov. 17, 2011 |
| Part Number | F6QG2G140P2KA | Version 1.1a | Final |

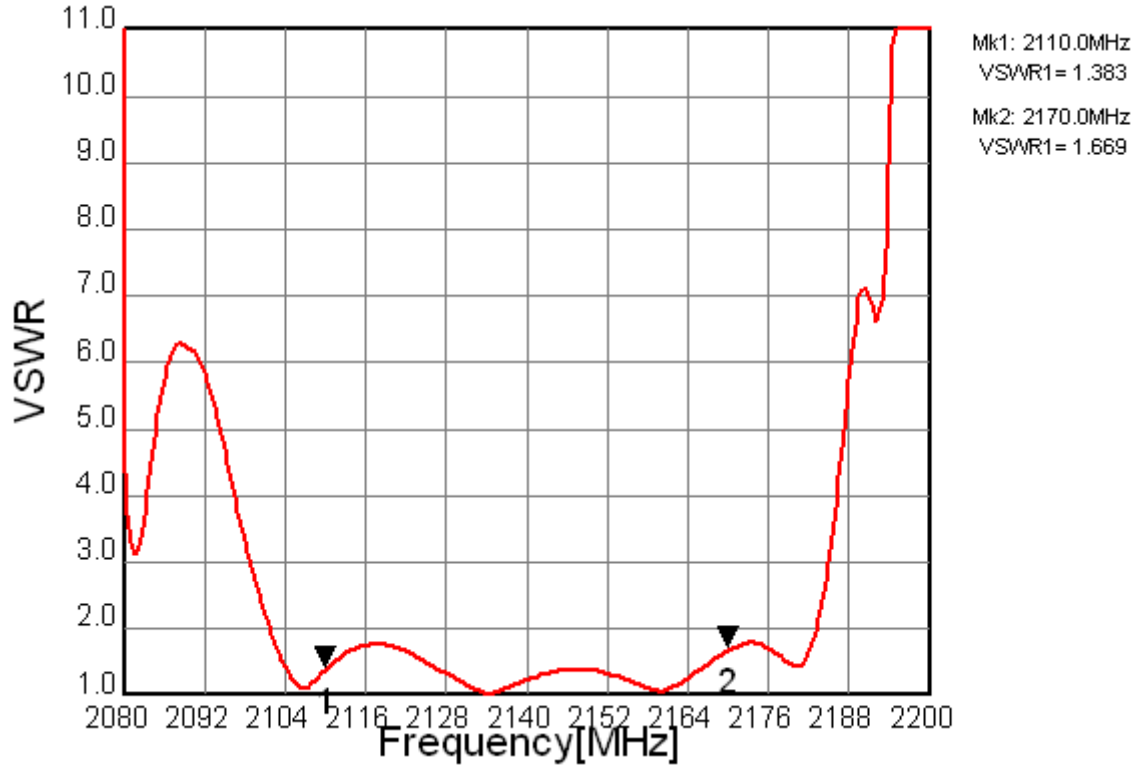


Fig.3 VSWR (INPUT)

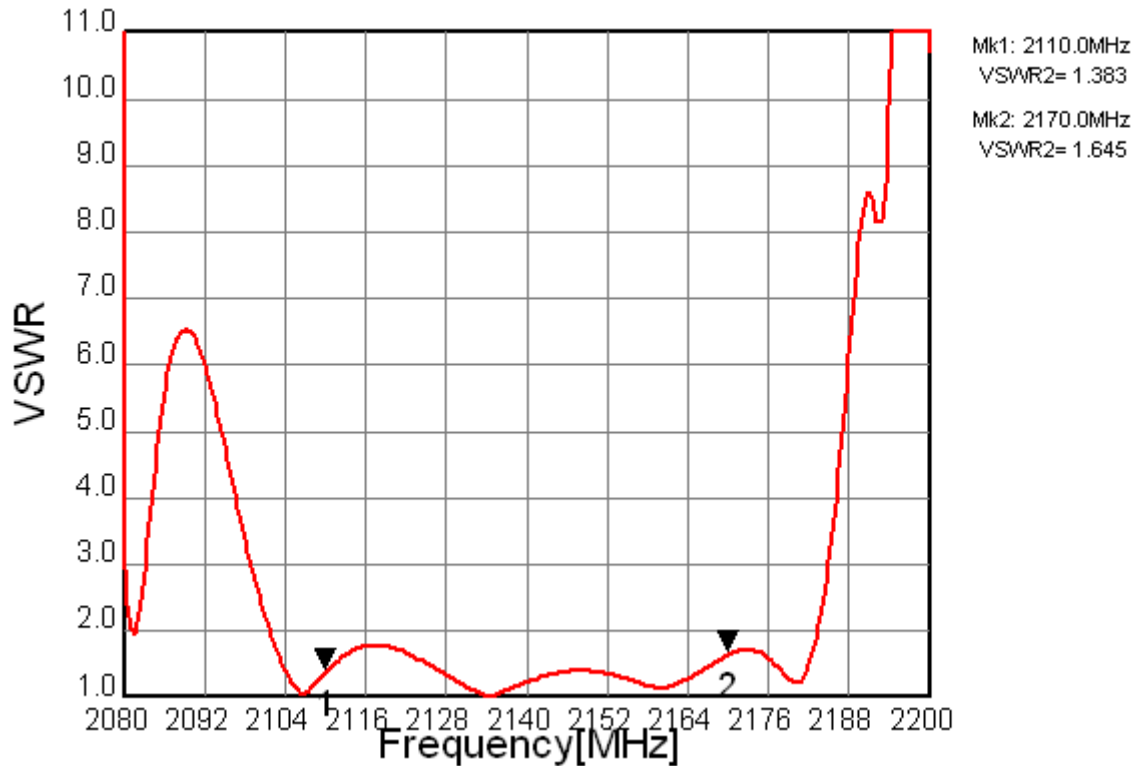


Fig.4 VSWR (OUTPUT)



MSL1

*Pb Free part

| | | | |
|---------------|------------------------|--|---------------|
| Customer Name | Standard specification | TAIYO YUDEN Mobile Technology Co.,Ltd. | |
| System | W-CDMA I & IV Rx | DATE | Nov. 17, 2011 |
| Part Number | F6QG2G140P2KA | Version 1.1a | Final |

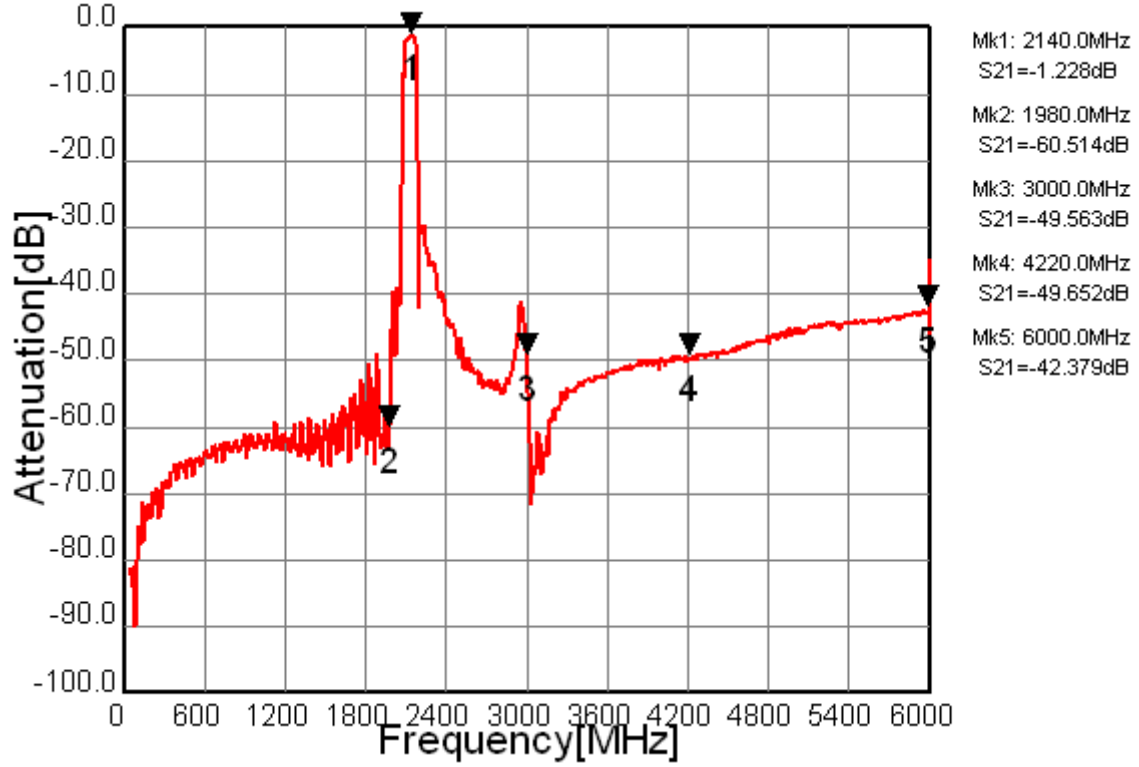


Fig.5 Wide-band Characteristic



MSL1

*Pb Free part

| | | | |
|---------------|------------------------|--|---------------|
| Customer Name | Standard specification | TAIYO YUDEN Mobile Technology Co.,Ltd. | |
| System | W-CDMA I & IV Rx | DATE | Nov. 17, 2011 |
| Part Number | F6QG2G140P2KA | Version 1.1a | Final |

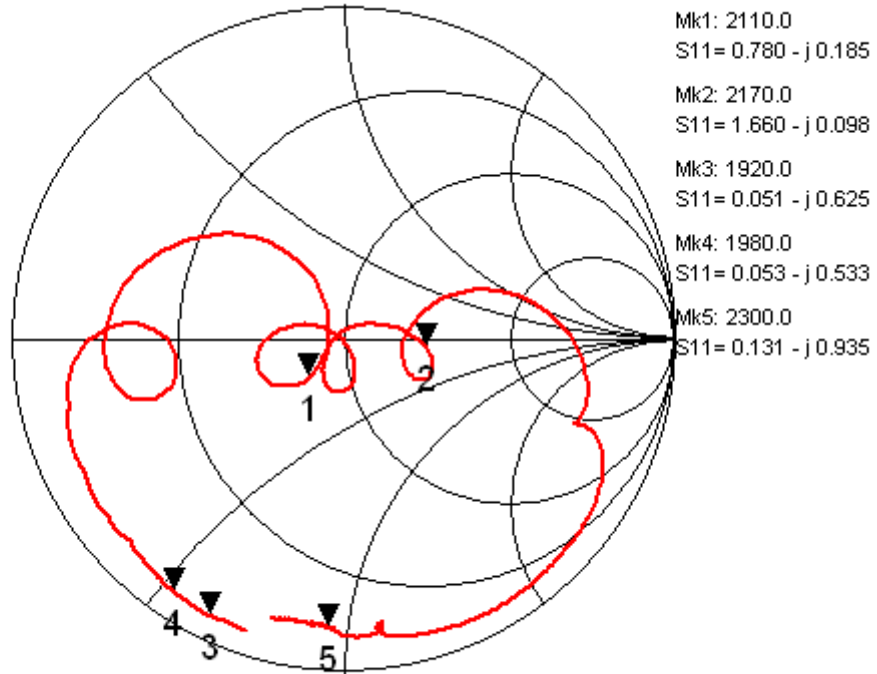


Fig.6 Impedance (S11)

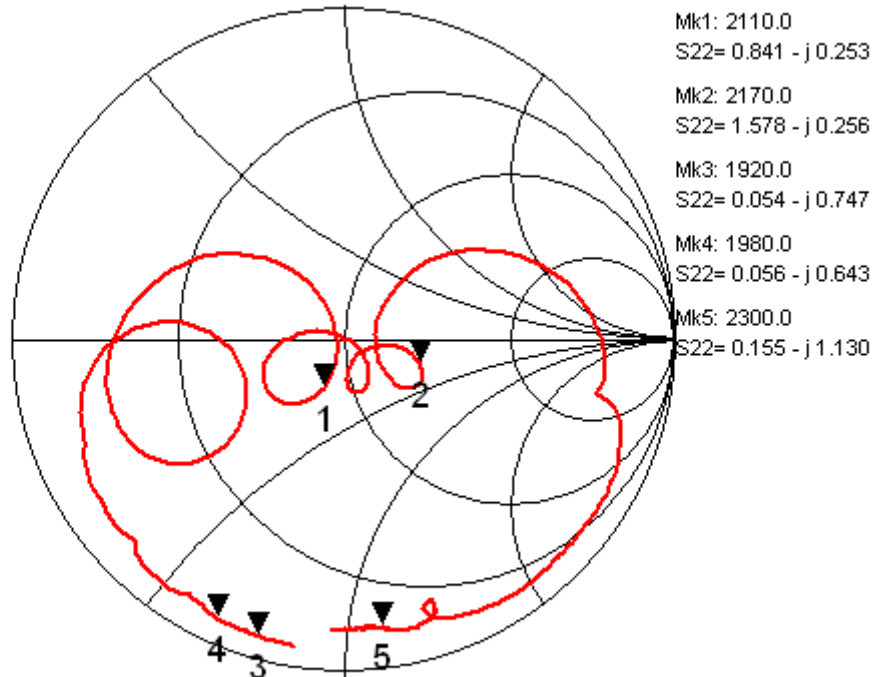


Fig.7 Impedance (S22)



MSL1

*Pb Free part

| | | | |
|---------------|------------------------|--|---------------|
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| Part Number | F6QG2G140P2KA | Version 1.1a | Final |

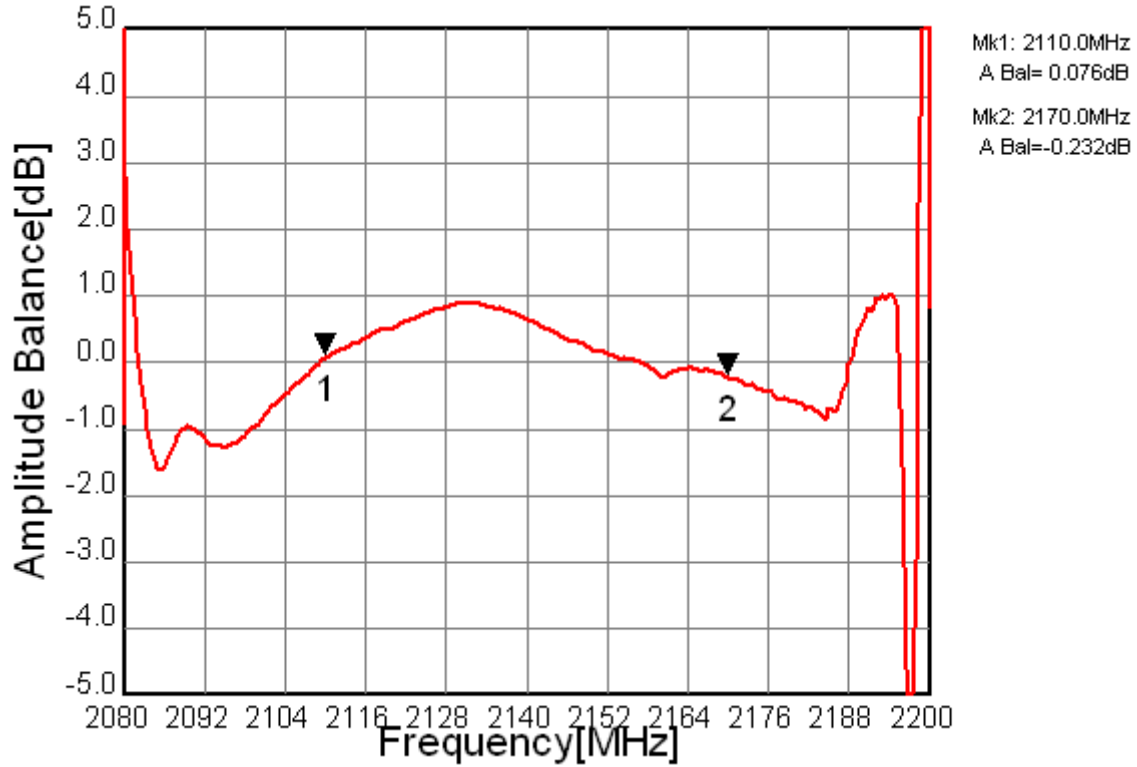


Fig.8 Amplitude balance

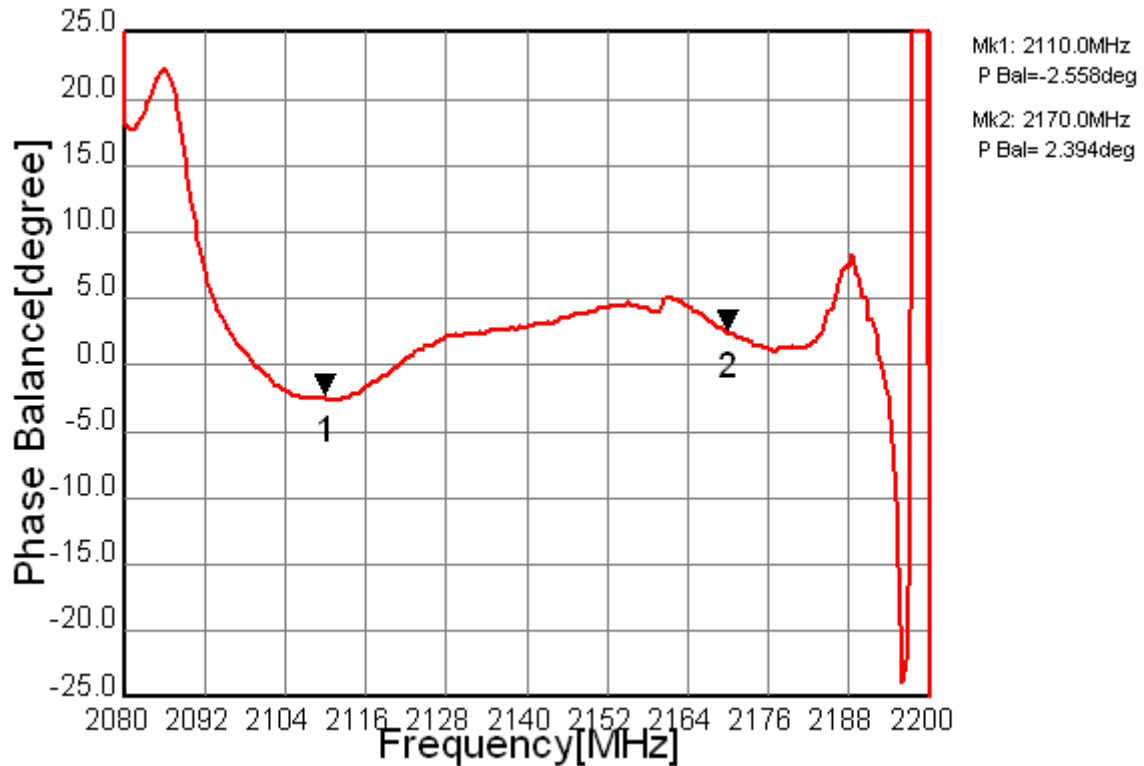


Fig.9 Phase balance



MSL1

*Pb Free part

| | | | |
|---------------|-------------------------------|---|---------------|
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| System | W-CDMA I & IV Rx | DATE | Nov. 17, 2011 |
| Part Number | F6QG2G140P2KA | Version 1.1a | Final |

Ordering Code

| Ordering Code | Packing | Reel size | Status |
|------------------|-------------|----------------------|--------|
| F6QG2G140P2KA-J | Tape & Reel | 5,000 pcs. | MP |
| F6QG2G140P2KA-JA | Tape & Reel | less than 5,000 pcs. | MP |
| F6QG2G140P2KA-Y | Tape & Reel | 15,000 pcs. | MP |
| F6QG2G140P2KA-Q | Bulk | few pcs. | MP |

*Minimum order quantity (MOQ) is assigned for each inquiry, Please contact to Sales Representatives.

*MP: Mass Production

Notice

All of the contents specified herein are subject to change without notice due to technical improvements, etc.

Please contact TAIYO YUDEN Co., Ltd. for further details of product specifications.

Please conduct validation and verification of products in actual condition of mounting and operating environment before commercial shipment of the equipment.