



\* Pb Free Part



|               |                                      |   |               |
|---------------|--------------------------------------|---|---------------|
| Customer Name | Standard                             | TAIYO YUDEN Mobile Technology Co., Ltd. |               |
| System        | Band 41 (2535-2655 MHz) Tx/Rx Filter | Date                                    | Apr. 25, 2019 |
| Part Number   | F6FC2G595H4PG                        | Version 1.2aA                           | Final         |

## Electrical Specification

**Table-1**

| Item                                   |       | Condition<br>(MHz) | Specification   |      |      | Unit | Remarks       |
|--|-------|--------------------|---|------|------|------|---------------|
|  |       |                    | Min.  | Typ. | Max. |      |               |
| Insertion loss (*1)                    |       | 2535 - 2555        | -   | 2.0  | 3.0  | dB   | -30 to +25 °C |
|  |       |                    | -   | 2.0  | 2.3  | dB   | +25 to +85 °C |
|  |       | 2555 - 2635        | -   | 1.5  | 1.8  | dB   |               |
|  |       | 2635 - 2655        | -   | 1.6  | 2.0  | dB   |               |
| Ripple                                 |       | 2535 - 2655        | -   | 1.3  | 2.2  | dB   |               |
| VSWR                                   | Tx/Rx | 2535 - 2655        | -   | 1.6  | 2.0  | -    |               |
|  | Ant   | 2535 - 2655        | -   | 1.8  | 2.1  | -    |               |
| Input power                            |       | 2535 - 2655        | +32.0dBm,<br>TDD 40% duty,<br>+50°C,3000h             |      |      | -    | HPUE Support  |
|  |       |                    | +32.0 dBm,<br>TD-LTE 40% duty<br>5MHz 1RB,+50°C,3000h |      |      | -    | HPUE Support  |
| Absolute attenuation                   |       | 10 - 960           | 45  | 49   | -    | dB   |               |
|  |       | 1225 - 1880        | 22  | 26   | -    | dB   |               |
|  |       | 1880 - 2400        | 21  | 25   | -    | dB   |               |
| Absolute attenuation(*2)               |       | 2401 - 2483        | 38  | 42   | -    | dB   |               |
| Absolute attenuation                   |       | 2750 - 4900        | 26  | 32   | -    | dB   |               |
|  |       | 4900 - 6000        | 35  | 52   | -    | dB   |               |
|  |       | 6000 - 8000        | 13  | 23   | -    | dB   |               |
| Terminal Impeadance                    |       | Tx/Rx port         | 50//2.4 nH  |      |      | Ω    |               |
|  |       | Ant port           | 50//2.4 nH  |      |      | Ω    |               |
| Operating Temperature                  |       |                    | -30 to +85  |      |      | °C   |               |
| Maximum DC in All Ports                |       |                    | -   | -    | 5    | VDC  | Device only   |
| DC Impedance to Ground                 |       |                    | 100   |      |      | MΩ   | Device only   |
| Device size (L typ. x W typ. x H max.) |       |                    | 1.1 x 0.9 x 0.44                                      |      |      | mm   |               |

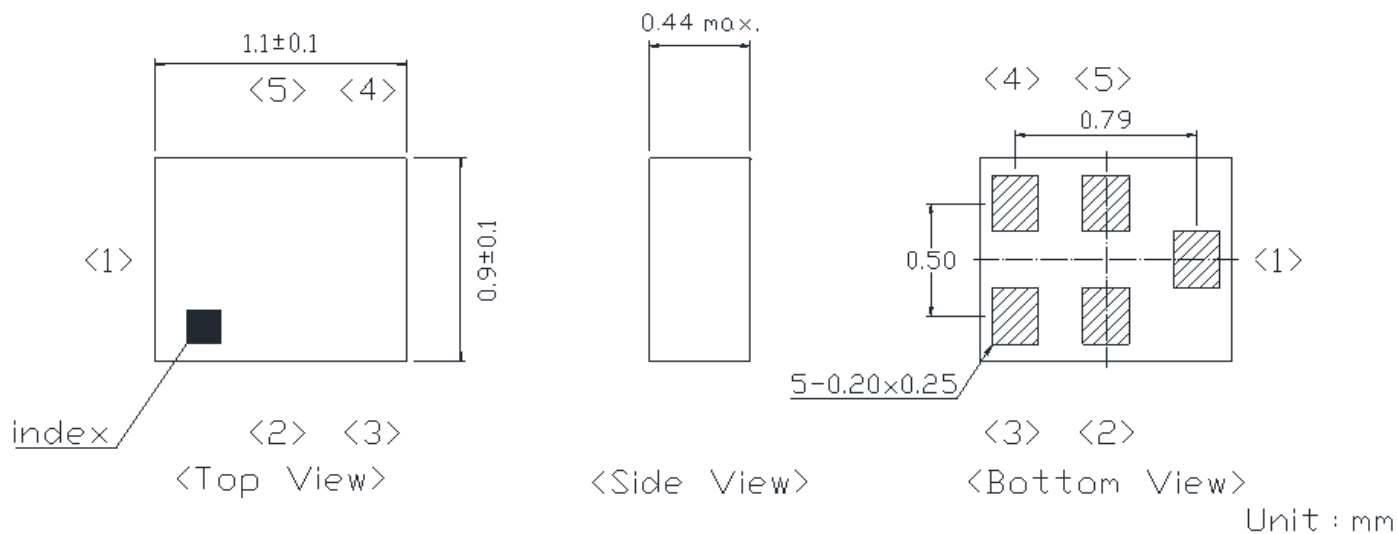
(\*1) Specification of insertion loss excludes loss that comes from the test board.

(\*2) Integrated attenuation over 18 MHz CH BW.



|               |                                      |   |               |
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| Part Number   | F6FC2G595H4PG                        | Version 1.2aA                           | Final         |

## Dimensions



**Figure-1**

## Pin Configuration

**Table-2**

| Pin No. | Symbol | Function               |
|---------|--------|------------------------|
| 1       | Tx/Rx  | Transmitter / Receiver |
| 2       | GND    | Ground                 |
| 3       | GND    | Ground                 |
| 4       | Ant    | Antenna                |
| 5       | GND    | Ground                 |



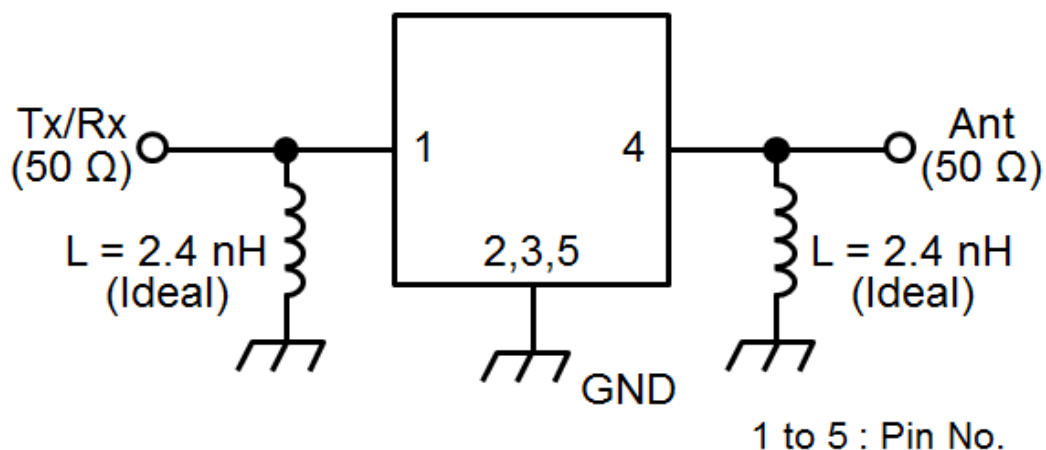
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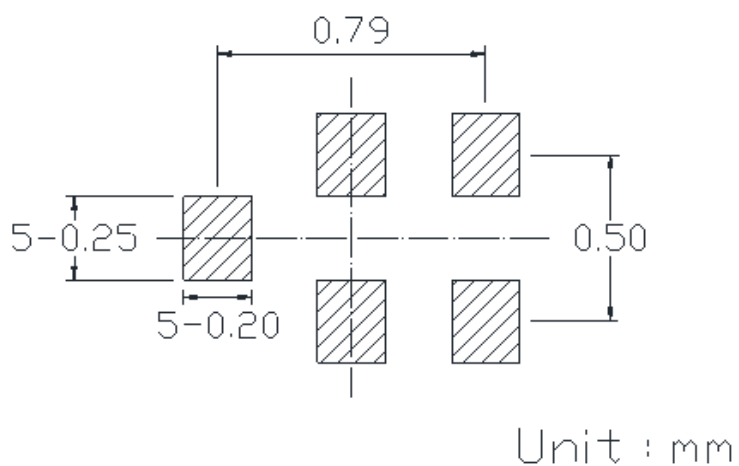
|               |                                      |   |               |
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### Evaluation Circuit



**Figure-2**

### Recommended Foot Print Pattern



**Figure-3**



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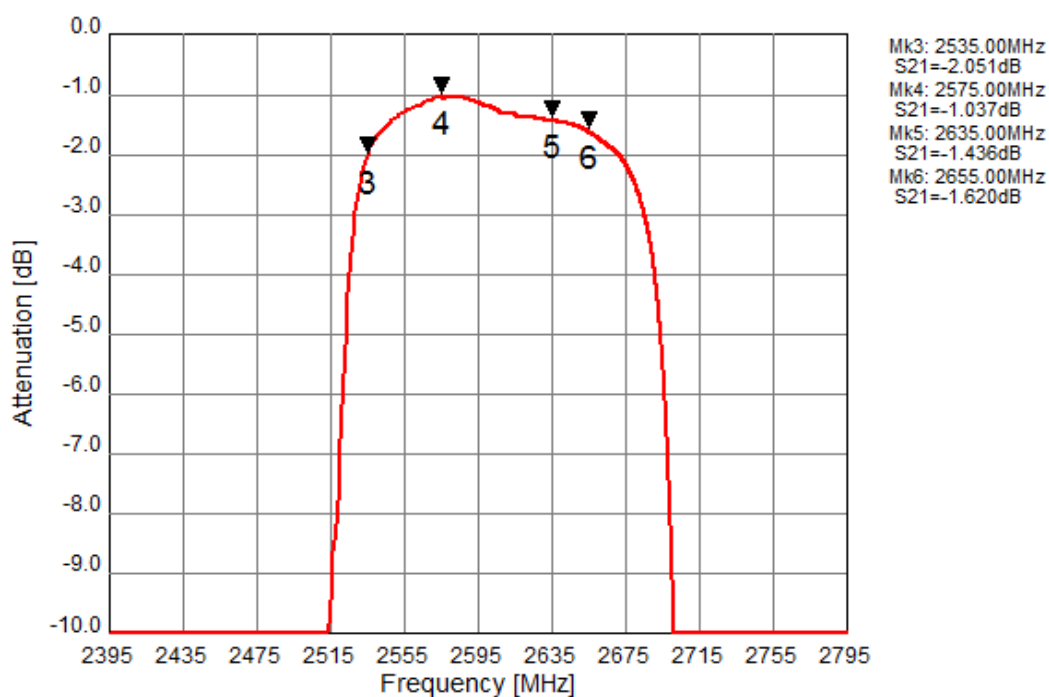
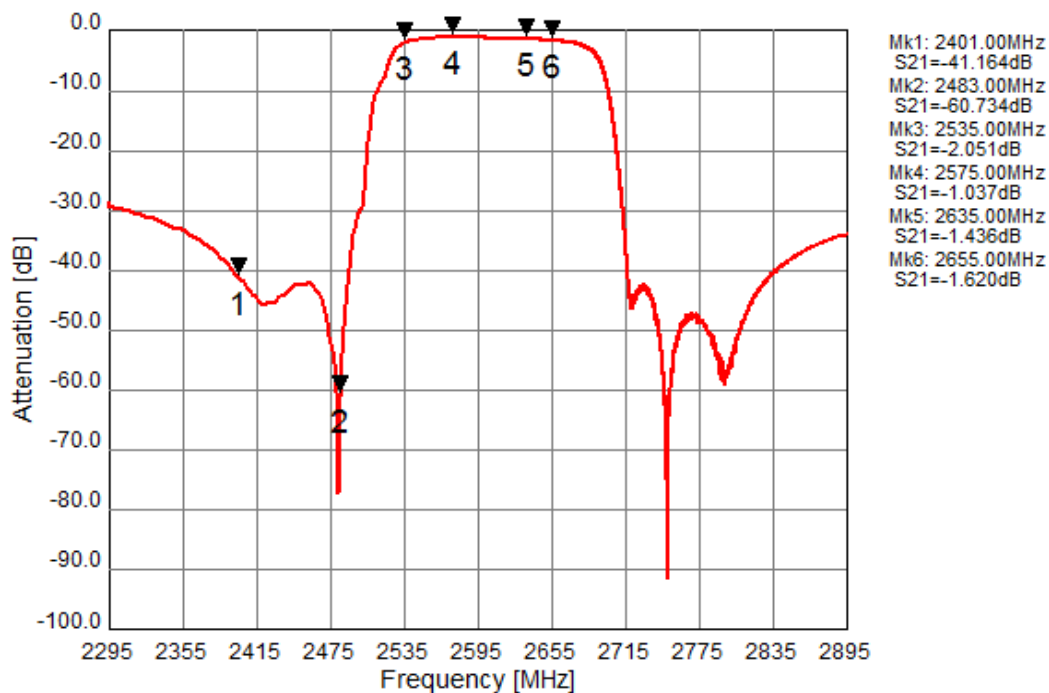


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## Electrical Characteristics

### Passband



**Figure-4-1**

These data excludes loss that comes from test board.

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## Tx/Rx Port

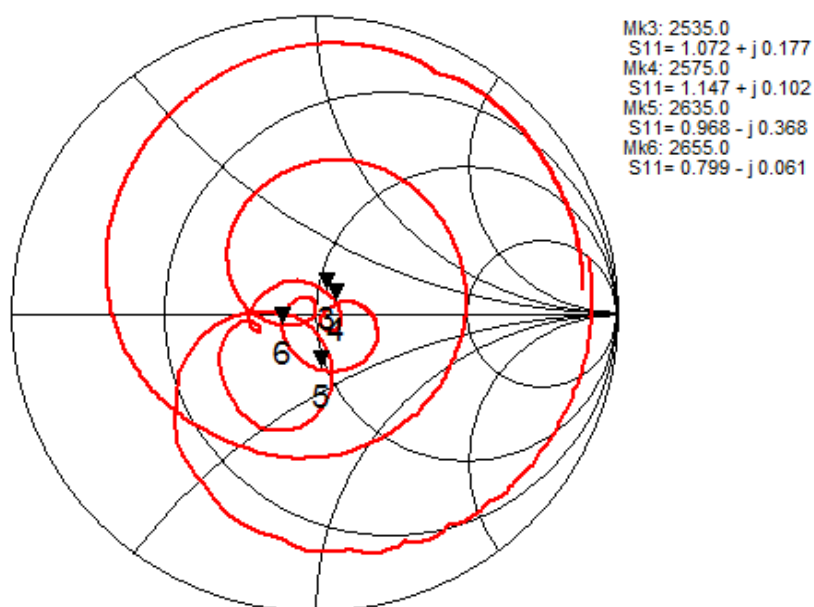
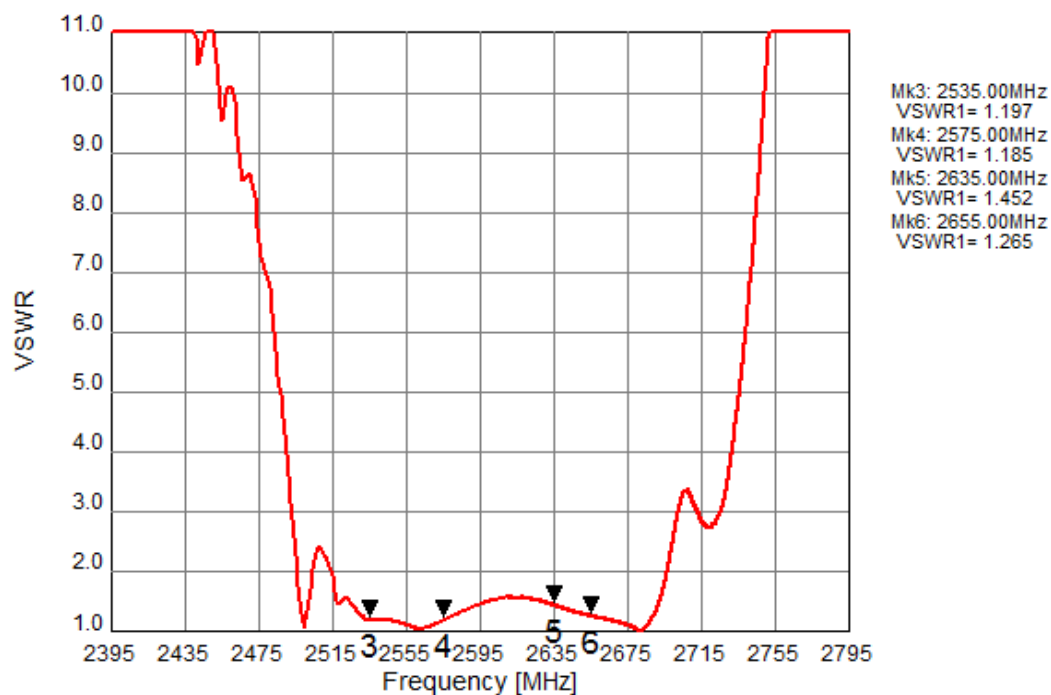


Figure-4-2



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|               |                                      |   |               |
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## Ant Port

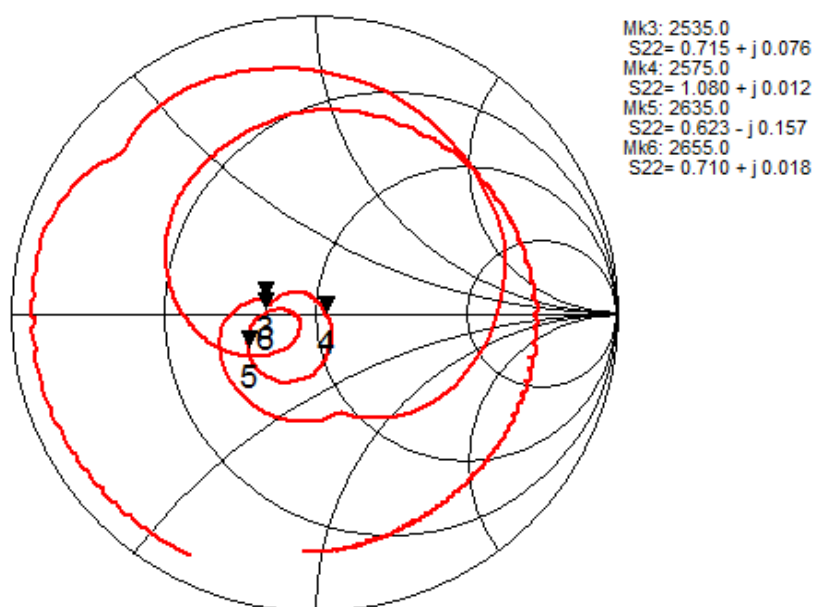
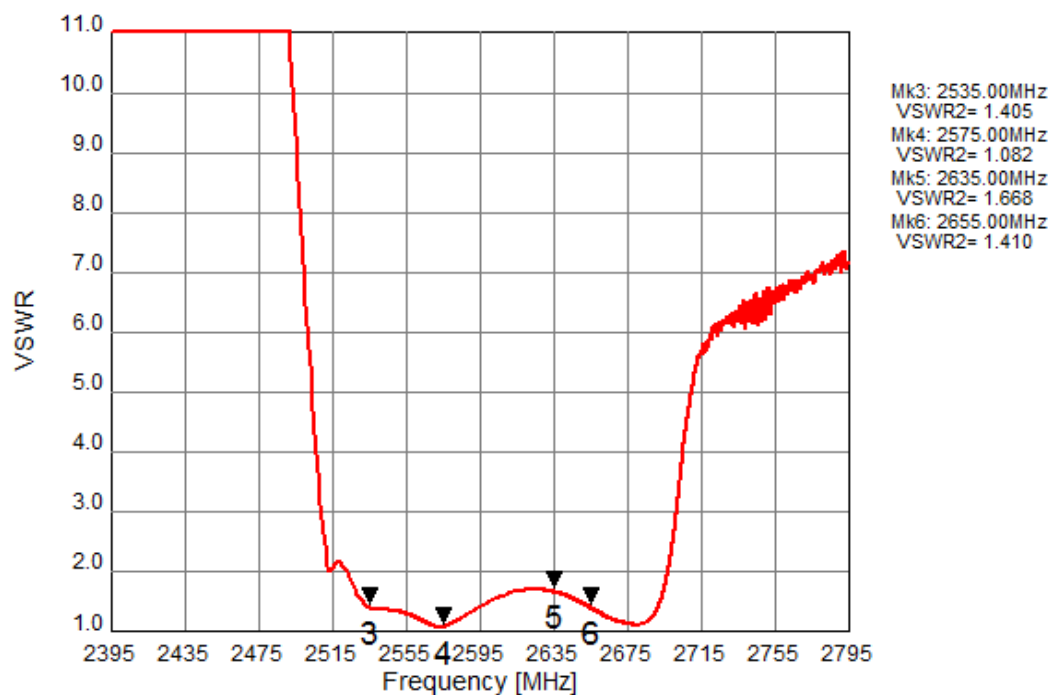


Figure-4-3



\* Pb Free Part



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|               |                                      |   |               |
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### Wide span

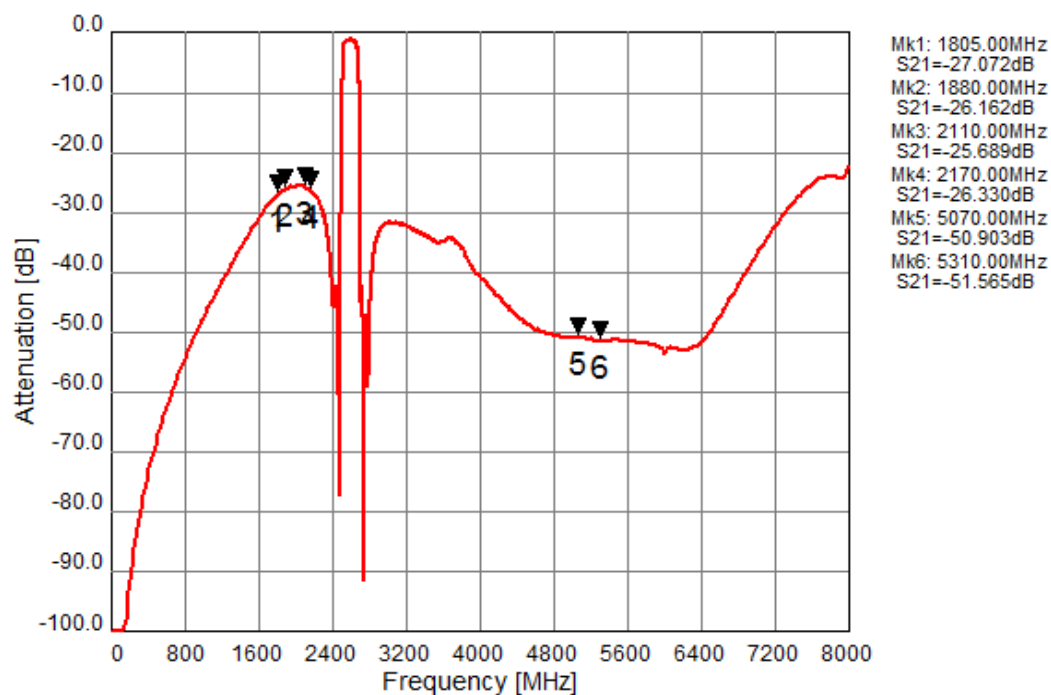


Figure-4-4



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|               |                                      |   |               |
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### Ordering Code

| Standard Ordering Code | Packing     | Reel size   | Status |
|------------------------|-------------|-------------|--------|
| F6FC2G595H4PG-X        | Tape & Reel | 10,000 pcs. | MP     |

| Option Ordering Code | Packing     | Reel size             | Status |
|----------------------|-------------|-----------------------|--------|
| F6FC2G595H4PG-XA     | Tape & Reel | less than 10,000 pcs. | MP     |
| F6FC2G595H4PG-Y      | Tape & Reel | 15,000 pcs.           | MP     |
| F6FC2G595H4PG-YA     | Tape & Reel | less than 15,000 pcs. | MP     |
| F6FC2G595H4PG-J      | Tape & Reel | 5,000 pcs.            | MP     |
| F6FC2G595H4PG-JA     | Tape & Reel | less than 5,000 pcs.  | MP     |
| F6FC2G595H4PG-Q      | Bulk        | few pcs.              | MP     |

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

\*MP : Mass Production





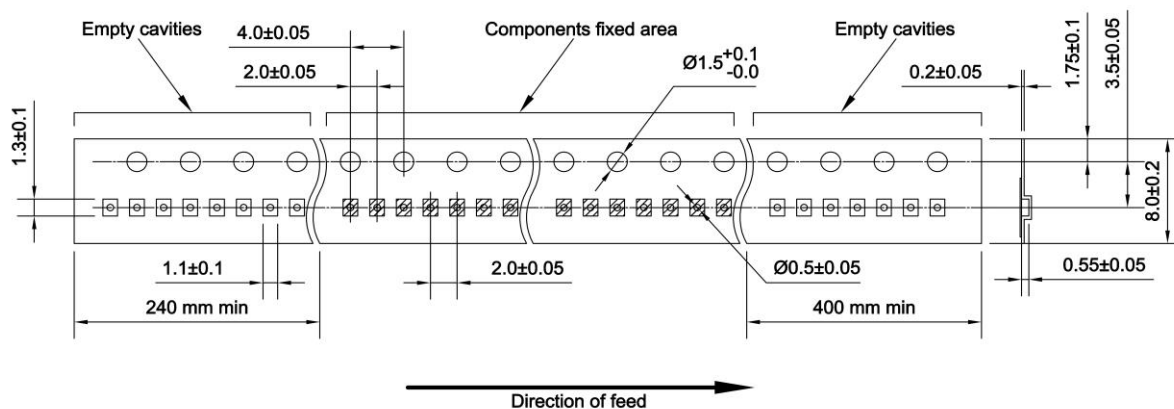
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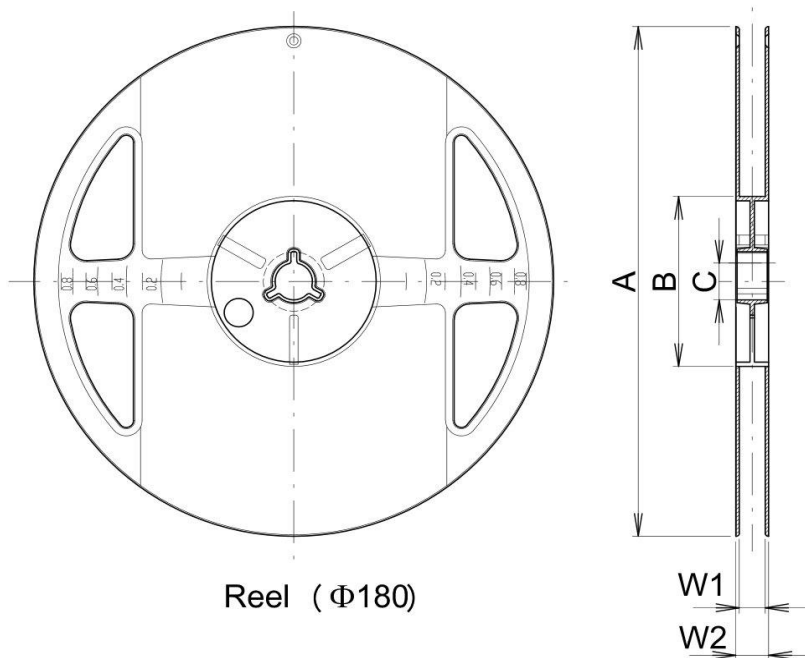
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## Tape and Reel Information

### Dimensions of Tape (Standard)



### Dimensions of Reel



| Order    | Code | Quantity (pcs./reel) | A    | B    | C        | W1          | W2        | Tape Pitch |
|----------|------|----------------------|------|------|----------|-------------|-----------|------------|
| Standard | X    | 10,000               | φ180 | φ60  | φ13 ±0.2 | 9 +1.0/-0.0 | 11.4 ±1.0 | 2.0 ±0.05  |
| Option   | Y    | 15,000               | φ330 | φ100 | φ13 ±0.2 | 9.4 ±1.0    | 13.4 ±1.0 | 4.0 ±0.1   |
| Option   | J    | 5,000                | φ180 | φ60  | φ13 ±0.2 | 9 +1.0/-0.0 | 11.4 ±1.0 | 4.0 ±0.1   |

Unit:mm



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Please do not incorporate our products into any equipment requiring high levels of safety and/or reliability (e.g., aerospace equipment, aviation equipment, medical equipment classified as Class IV by IMDRF, nuclear control equipment, undersea equipment, military equipment).  
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