

**KYOCERA SAW Filter**  
**- GNSS -**  
**Type Name : SF14-1582M5UUS1**

May, 28, 2024

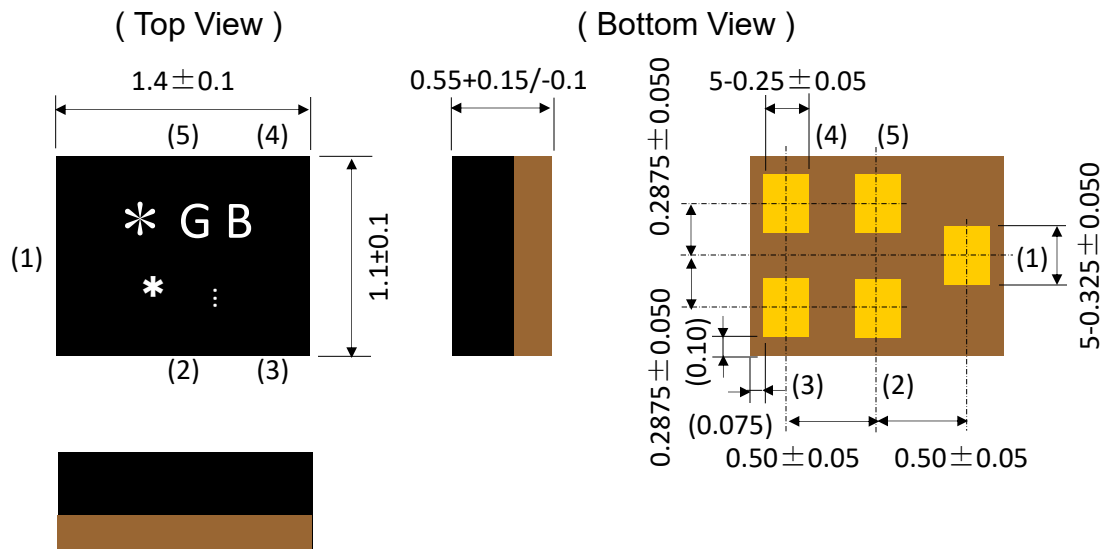
KYOCERA Corporation

Corporate Electronic Devices Group

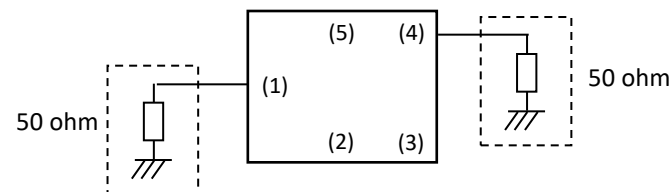
Electronic Devices Division

# Dimensions & Test Circuit of SAW Filter

## ■ Dimensions



## ■ Test Circuit



Unit : mm  
 \* : Identification mark  
 GB : Identification No.  
 \* : Monthly Code  
 : : Index mark of ten days

### Pin allocation

| Pin No. | Function |
|---------|----------|
| (1)     | Input    |
| (2)     | GND      |
| (3)     | GND      |
| (4)     | Output   |
| (5)     | GND      |

| Items                       | Specification |      |      | Unit  | Note      |
|-----------------------------|---------------|------|------|-------|-----------|
|                             | min.          | typ. | max. |       |           |
| Operating Temperature Range | -40 to +85    |      |      | deg.C |           |
| Storage Temperature Range   | -40 to +85    |      |      | deg.C |           |
| Max Input Power             | -             | -    | +12  | dBm   |           |
| Nominal Input Impedance     | 50            |      |      | ohm   | Unbalance |
| Nominal Output Impedance    | 50            |      |      | ohm   | Unbalance |

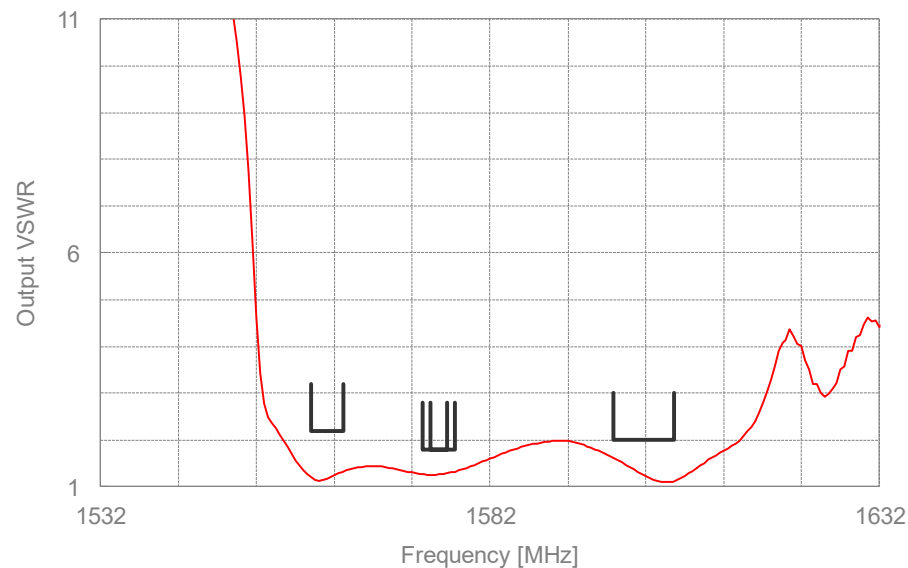
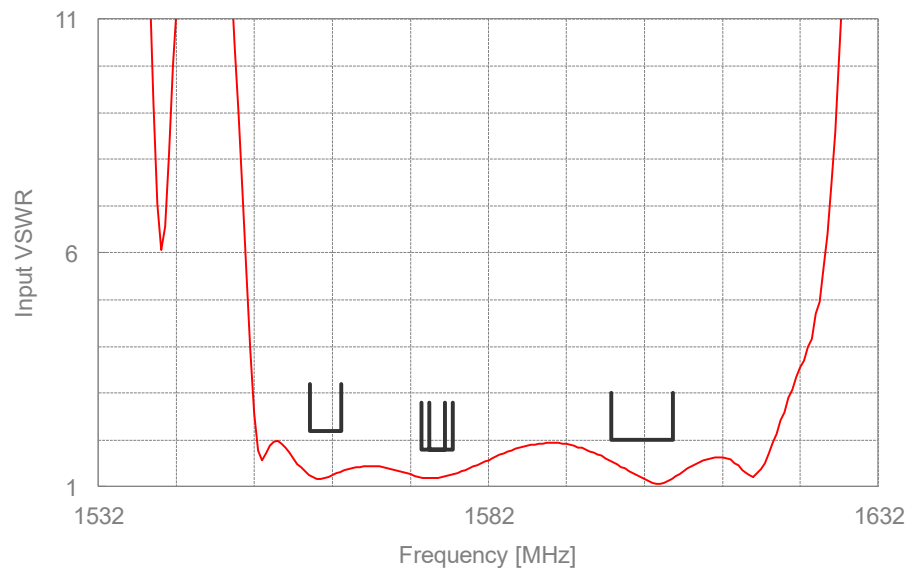
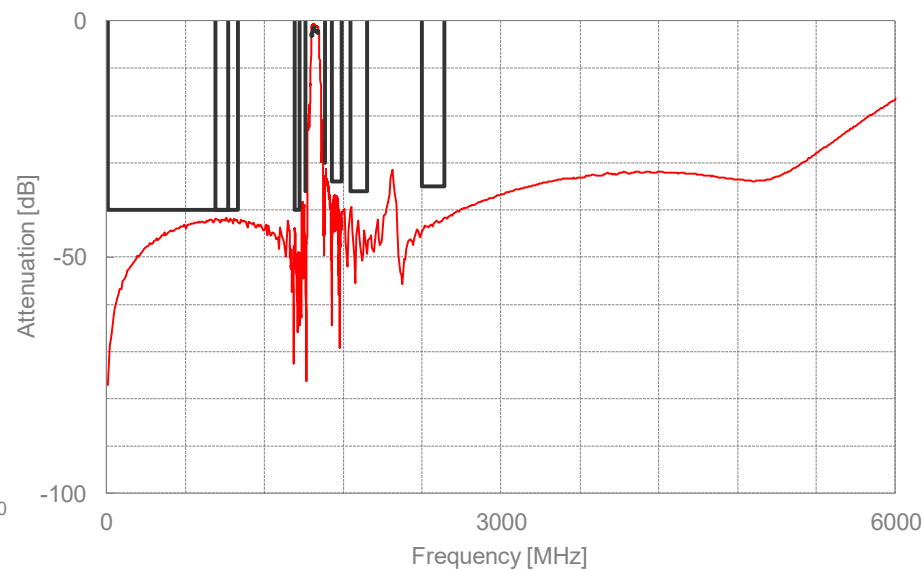
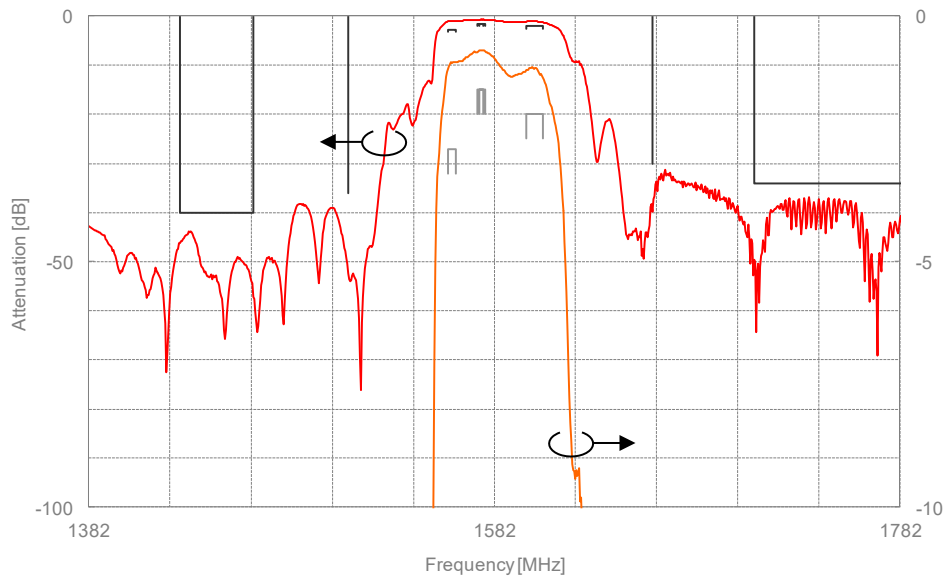
# Characteristic table

| Items                    | Frequency<br>[MHz] |    |         | Specification |      |      | Unit | Note         |
|--------------------------|--------------------|----|---------|---------------|------|------|------|--------------|
|                          |                    |    |         | min.          | typ. | max. |      |              |
| Nominal Center Frequency | -                  |    |         | 1582          |      |      | MHz  |              |
| Insertion Loss           | 1574.39            | to | 1576.45 | -             | 0.9  | 1.5  | dB   |              |
|                          | 1597.78            | to | 1605.66 | -             | 1.4  | 2.0  | dB   |              |
|                          | 1559.05            | to | 1563.15 | -             | 1.4  | 2.8  | dB   | -40 to +85°C |
|                          |                    |    |         |               |      | 2.7  | dB   | -30 to +85°C |
| Input VSWR               | 1573.37            | to | 1577.47 | -             | 0.9  | 1.5  | dB   |              |
|                          | 1574.39            | to | 1576.45 | -             | 1.2  | 1.8  | -    |              |
|                          | 1597.78            | to | 1605.66 |               | 1.5  | 2.0  | -    |              |
|                          | 1559.05            | to | 1563.15 |               | 1.4  | 2.2  | -    |              |
| Output VSWR              | 1573.37            | to | 1577.47 |               | 1.3  | 1.8  | -    |              |
|                          | 1574.39            | to | 1576.45 | -             | 1.2  | 1.8  | -    |              |
|                          | 1597.78            | to | 1605.66 |               | 1.6  | 2.0  | -    |              |
|                          | 1559.05            | to | 1563.15 |               | 1.3  | 2.3  | -    |              |
| Absolute Attenuation     | 1573.37            | to | 1577.47 |               | 1.3  | 1.8  | -    |              |
|                          | 10                 | to | 1000    | 40            | 42   | -    | dB   |              |
|                          | 824                | to | 925     | 40            | 42   | -    | dB   |              |
|                          | 1427               | to | 1463    | 40            | 45   | -    | dB   |              |
|                          | 1510               |    |         | 36            | 49   | -    | dB   |              |
|                          | 1660               |    |         | 30            | 37   | -    | dB   |              |
|                          | 1710               | to | 1785    | 34            | 37   | -    | dB   |              |
|                          | 1850               | to | 1980    | 36            | 39   | -    | dB   |              |
|                          | 2400               | to | 2570    | 35            | 40   | -    | dB   |              |

# Typical Curve Data

SF14-1582M5UUS1

Spec.



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