

Datasheet of SAW Filter

1109 GNSS

For GPS(L5) _GALILEO(E5b)_BEIDOU(B2b)

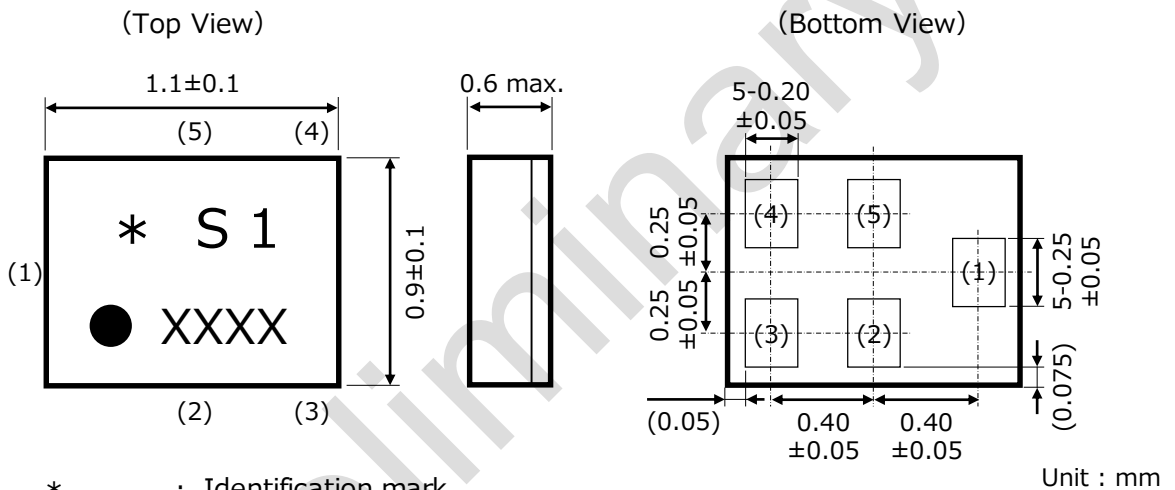
KYOCERA Part No. : SF11-1192M5UUA1

Preliminary

Rating

| Items | | Rating | Unit | Note |
|-----------------------------|---------------|------------|-------|----------------------------|
| Operating Temperature Range | | -40 to +85 | deg.C | |
| Storage Temperature Range | | -40 to +85 | deg.C | |
| Max Input Power In Band | | 15 | dBm | 5,000Hours, Ta=50deg.C, CW |
| ESD Level | Machine Model | 50 | Volt | Complied to JESD22-A115 |
| Nominal Input Impedance | | 50//8.2nH | ohm | Unbalance |
| Nominal output Impedance | | 50//8.2nH | ohm | Unbalance |

Dimensions

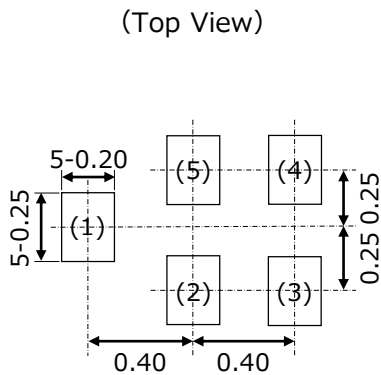


- * : Identification mark
- S1 : Identification no.
- : Index mark of pin 1
- XXXX : Production code

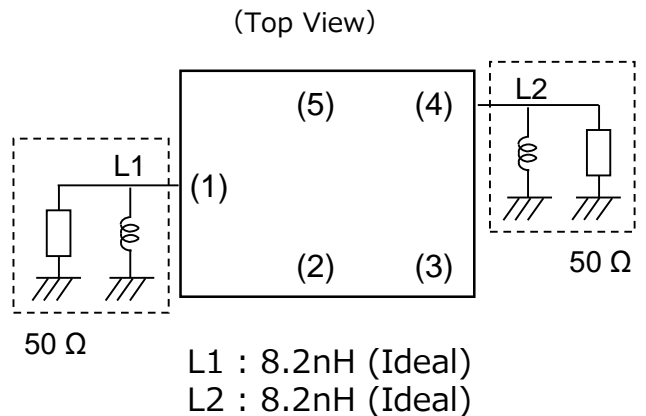
| Pin No. | Function |
|---------|----------|
| (1) | Input |
| (4) | Output |
| Others | GND |

Unit : mm

Recommendable Land Pattern



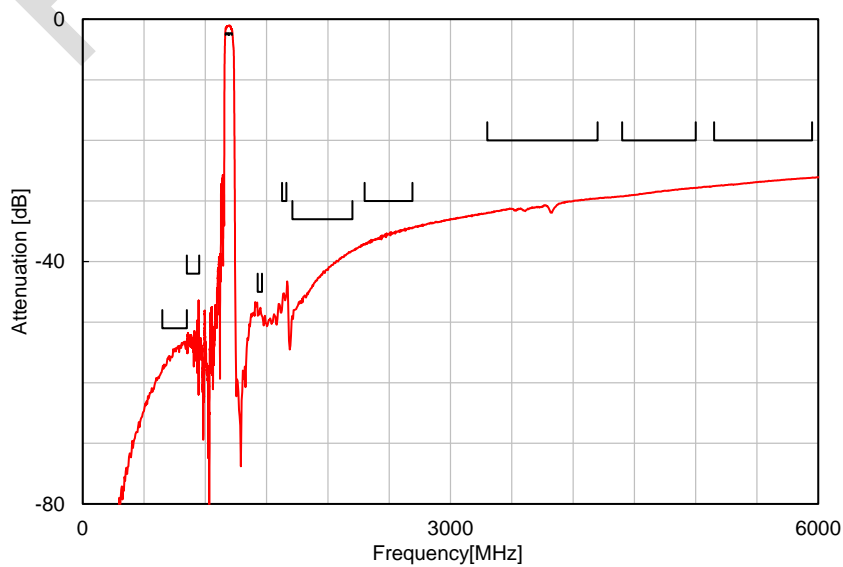
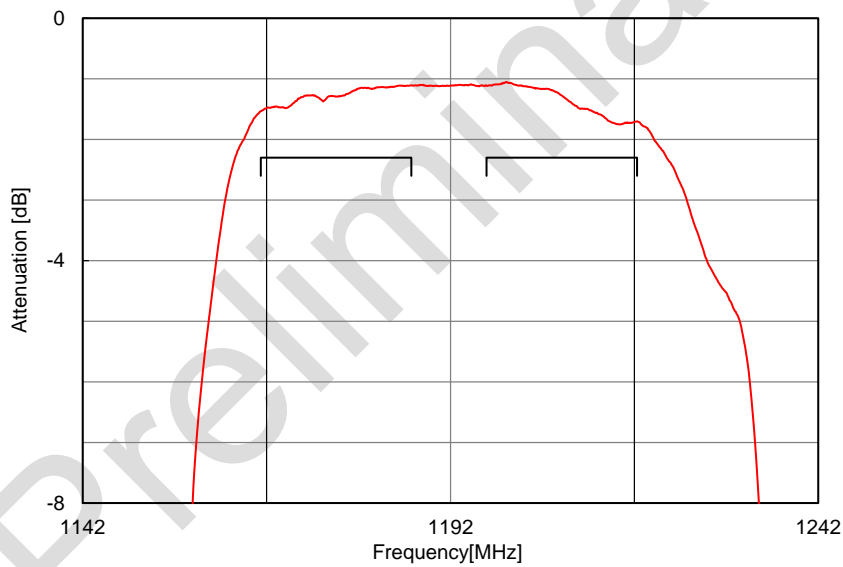
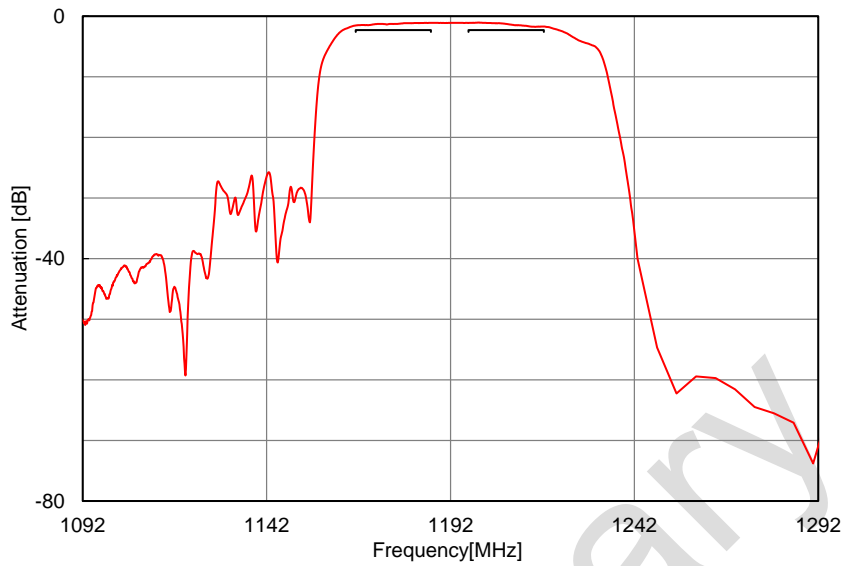
Measurement Circuit



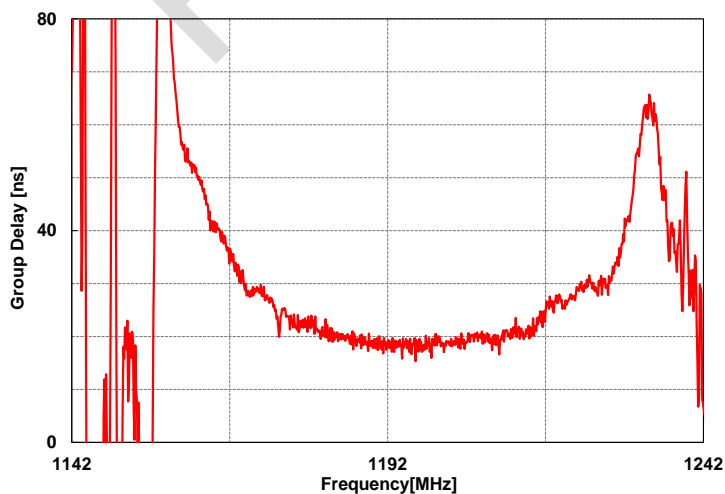
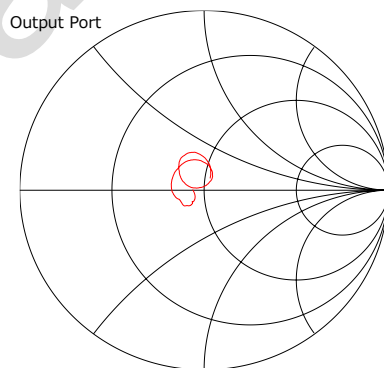
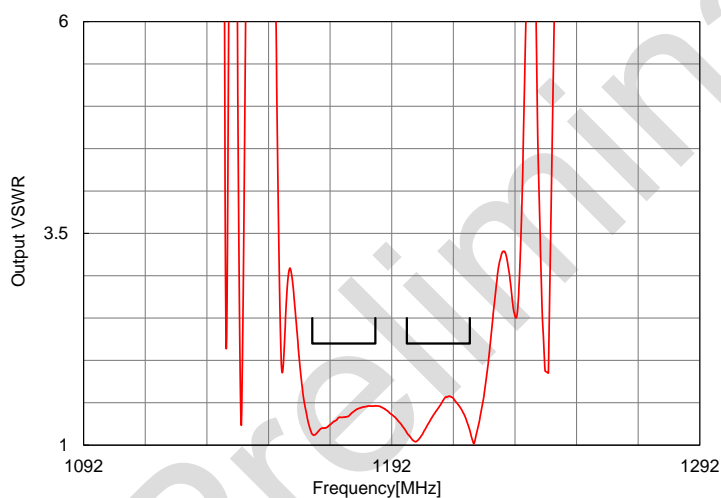
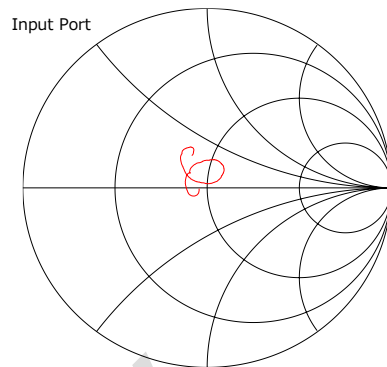
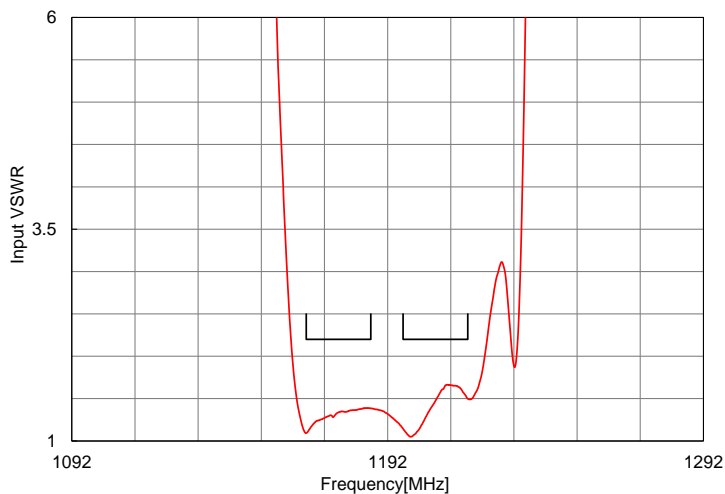
Electrical Characteristics

| ITEM | Frequency[MHz] | Unit | Kyocera Development Specification | | | Note | |
|----------------------|-------------------|-------------------|-----------------------------------|-----|-----|----------|--|
| | | | min | typ | max | | |
| Insertion Loss | 1166.22 - 1186.68 | dB | - | 1.3 | 2.3 | | |
| | 1196.91 - 1217.37 | dB | - | 1.7 | 2.3 | | |
| GDT Ripple Deviation | 1166.22 - 1186.68 | ns | - | 16 | 35 | | |
| | 1196.91 - 1217.37 | ns | - | 10 | 25 | | |
| VSWR | In | 1166.22 - 1186.68 | - | - | 1.3 | 2.2 | |
| | | 1196.91 - 1217.37 | - | - | 1.5 | 2.2 | |
| | Out | 1166.22 - 1186.68 | - | - | 1.3 | 2.2 | |
| | | 1196.91 - 1217.37 | - | - | 1.3 | 2.2 | |
| Attenuation | 650 - 850 | dB | 51 | 54 | - | | |
| | 850 - 950 | dB | 42 | 48 | - | | |
| | 850 - 950 | dB _{INT} | 45 | 53 | - | any 5MHz | |
| | 1427 - 1463 | dB | 45 | 49 | - | | |
| | 1626 - 1661 | dB | 30 | 45 | - | | |
| | 1710 - 2200 | dB | 33 | 38 | - | | |
| | 2300 - 2690 | dB | 30 | 34 | - | | |
| | 3300 - 4200 | dB | 20 | 28 | - | | |
| | 4400 - 5000 | dB | 20 | 26 | - | | |
| 5150 - 5950 | dB | 20 | 25 | - | | | |

Electrical Characteristics

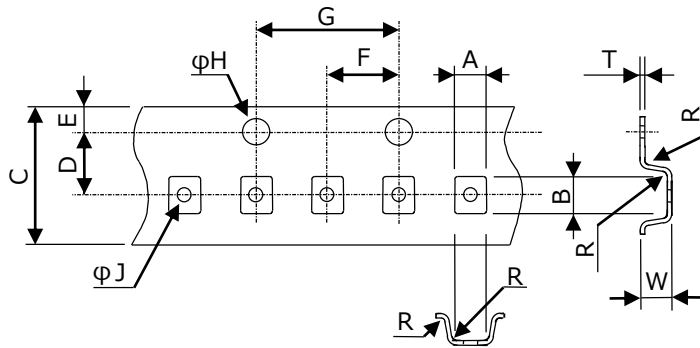


Electrical Characteristics



Tape & Reel Specification

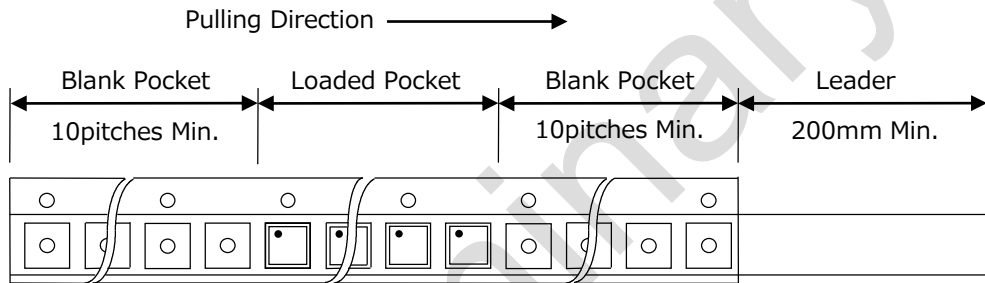
[Tape]



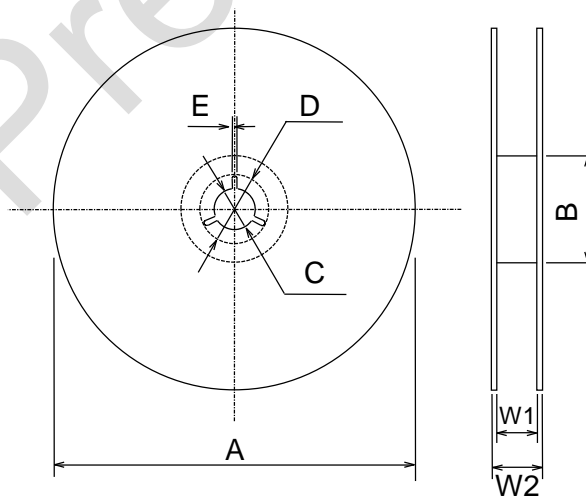
Unit : mm

| Part | Dimension |
|------|-----------|
| A | 1.1±0.1 |
| B | 1.3±0.1 |
| C | 8.0±0.2 |
| D | 3.50±0.05 |
| E | 1.75±0.10 |
| F | 2.0±0.1 |
| G | 4.0±0.1 |
| φH | 1.5±0.1 |
| φJ | 0.50±0.05 |
| R | 0.1 Max |
| W | 0.60±0.05 |
| T | 0.20±0.05 |

W : Dimension is depth of pockets.



[Reel]



| | | | | | |
|-----------|-------------|-------------|-----------|---------|-----------|
| Part | A | B | C | D | Unit : mm |
| Dimension | 180 +0/-1.5 | 60 +1.0/-0 | 13 ±0.2 | 21 ±0.8 | |
| Part | E | W1 | W2 | | |
| Dimension | 2 ±0.5 | 9.0 +1.0/-0 | 11.4 ±1.0 | | |

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