



Data Sheet
2492MHz SAW 3030
SPT2492M3030A

V1.0

Description:

The Spectron SPT2492M3030A is a SAW filter that work frequency ranges from 2487MHz to 2497MHz. It is designed for applications in GNSS, Beidou System, IOT equipments and Information & Communications filed.

The SPT2492M3030A provides +10 dBm power handling, low insertion loss and high out of band rejection.

The design and manufacturing of the SPT2492M3030A exploit Spectron's exclusive TSAW technology to deliver competitive performance against state of the art at a low cost.

The SPT2492M3030A is compatible with high volume, lead-free SMT soldering processes.

Features:

- Single-Ended Input and Output
- Terminating Impedance: 50 Ω
- RoHS Compliant

Specifications:

- Operation Temperature: -40°C to +85°C
- Usable passband 10.0 MHz
- Compact miniature size
 - 3.0 mm \times 3.0 mm footprint
 - 1.25 mm max-height

Applications:

- GNSS
- IOT equipments
- Information & Communications Devices
- Beidou System

Electrical Specifications**Table 1** Electrical Specifications.

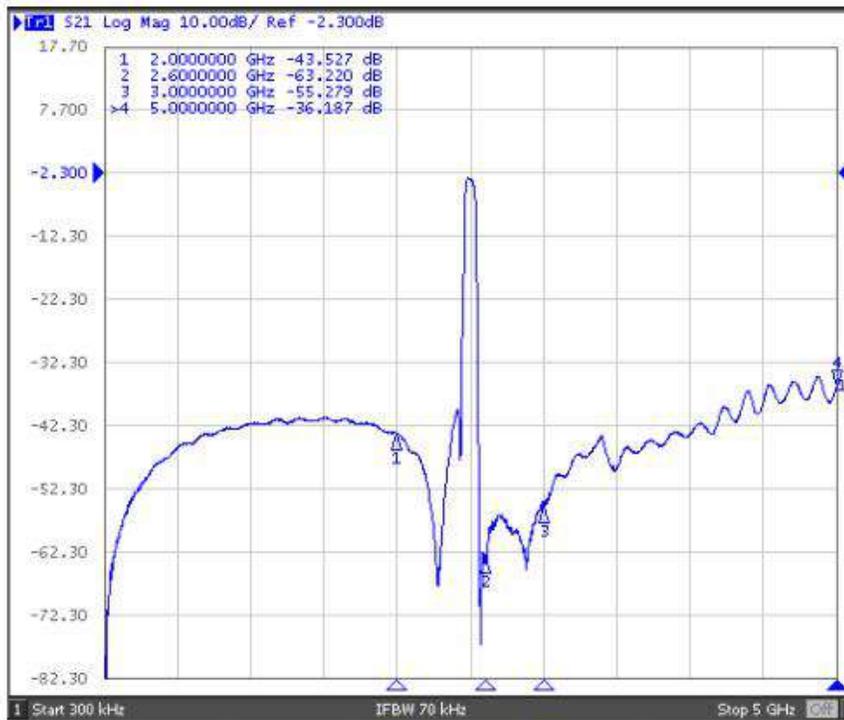
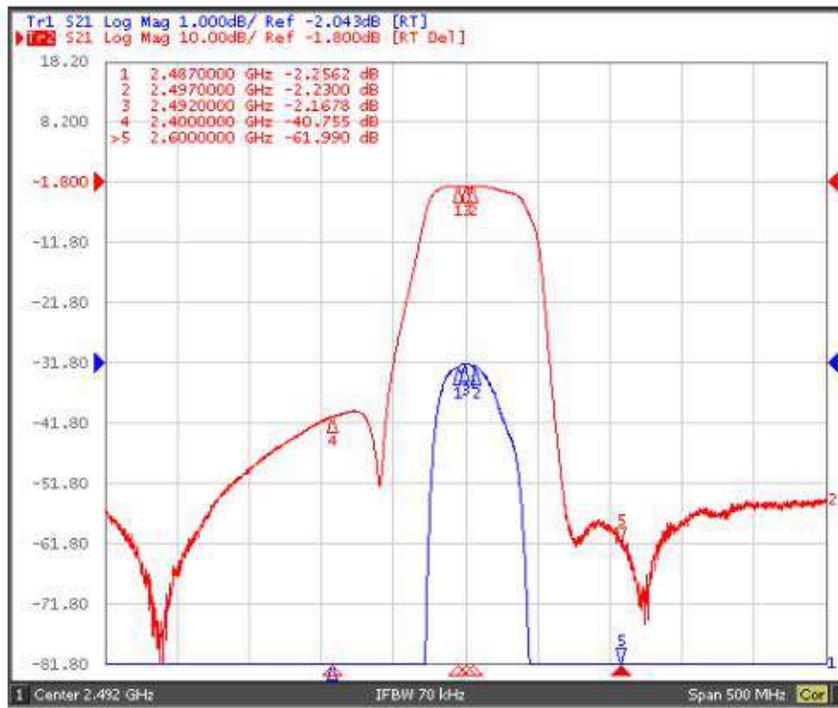
Test Temperature: 25°C±2°C

| Item | | Minimum | Typical | Maximum | Unit |
|--|----------------|---------|---------|---------|------|
| Center Frequency | f_c | | 2492.00 | | MHz |
| Insertion Loss(min) | IL | | 2.0 | 2.5 | dB |
| Insertion Loss 2487.00 – 2497.00MHz | IL | | 2.2 | 3.0 | dB |
| Amplitude Ripple (p-p) 2487.00 – 2497.00MHz | $\Delta\alpha$ | | 0.4 | 1.0 | dB |
| Group Delay Ripple 2487.00 – 2497.00MHz | GDR | | 10.0 | 30.0 | ns |
| Absolute Attenuation | α | | | | |
| DC - 1000.00 MHz | | 30.0 | 35.0 | | dB |
| 1000.00 - 1616.00 MHz | | 30.0 | 35.0 | | dB |
| 1616.00 - 2400.00 MHz | | 32.0 | 37.0 | | dB |
| 2600.00 - 3000.00 MHz | | 45.0 | 50.0 | | dB |
| 3000.00 - 5000.00 MHz | | 15.0 | 20.0 | | dB |
| Input VSWR 2487.00 – 2497.00MHz | | | 1.7:1 | 2.0:1 | / |
| Output VSWR 2487.00 – 2497.00MHz | | | 1.7:1 | 2.0:1 | / |

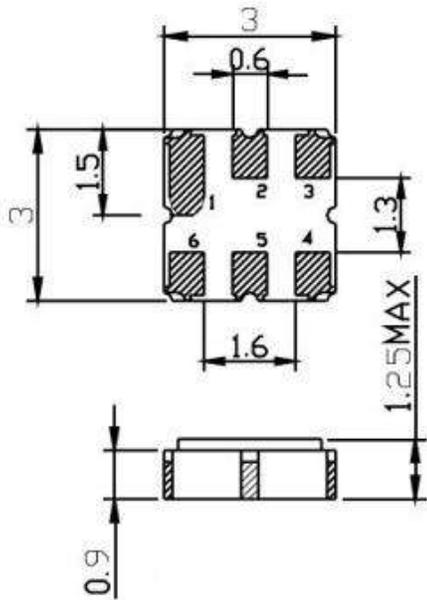
Figure 1 Electrical Characteristics:

Frequency Response

Frc

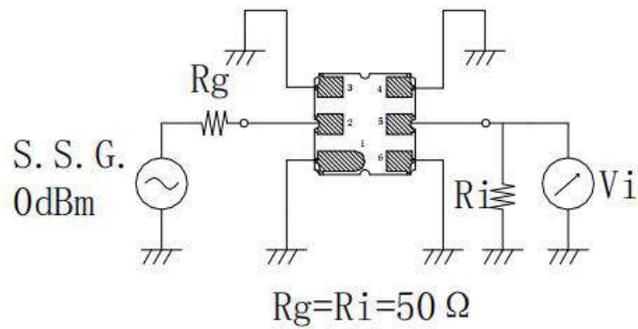


Package & Dimensions



| Pin No. | Description |
|---------|-------------|
| 2 | Input |
| 5 | Output |
| 1,3,4,6 | Ground |

Test circuit



Maximum Ratings

| Item | | Value | Unit |
|-----------------------|-----------|------------|------|
| Operation Temperature | T | -40 ~ +85 | °C |
| Storage Temperature | T_{stg} | -40 ~ +125 | °C |
| RF Power Dissipation | P | 10 | dBm |

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