

Data Sheet 2595MHz SAW 3030 SPT2595M3030A

V1.0

Description:

The Spectron SPT2595M3030A is a SAW filter that work frequency ranges from 2570 to 2620MHz.It is designed for applications in Base Station, IOT equipments and Information& Communications filed.

The SPT2595M3030A provides +10 dBm power handling, low insertion loss and high out of band rejection.

The design and manufacturing of the SPT2595M3030A exploit Spectron's exclusive TSAW technology to deliver competitive performance against state of the art at a low cost.

The SPT2595M3030A 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 50.0 MHz
- Compact miniature size
 - $-3.0 \text{ mm} \times 3.0 \text{ mm footprint}$
 - 1.25 mm max-height

Applications:

- IOT equipments
- Information& Communications Devices
- Base Station

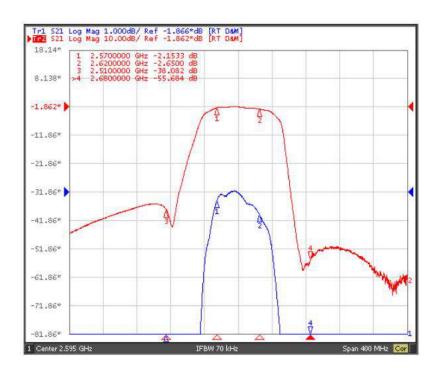
Electrical Specifications

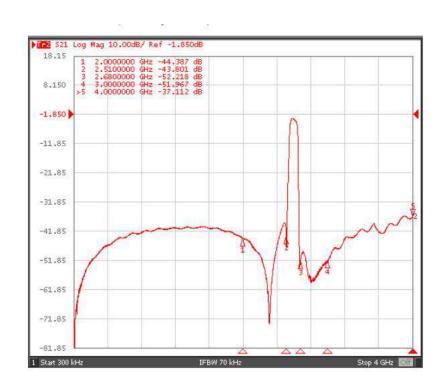
 Table 1 Electrical Specifications.

Test Temperature: 25°C±2°C

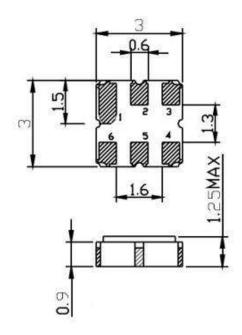
Item		Minimum	Typical	Maximum	Unit
Center Frequency	fc		2595.0		MHz
Insertion Loss 2570.00-2620.00 MHz	IL		2.7	4.0	dB
Amplitude Ripple (p-p) 2570.00-2620.00 MHz	$\triangle a$		0.5	1.8	dB
Absolute Attenuation	a				
DC-2000.00 MHz		35.0	38.0		dB
2000.00-2510.00 MHz		30.0	35.0		dB
2680.00-3000.00MHz		40.0	45.0		dB
3000.00-4000.00 MHz		20.0	35.0		dB
VSWR 2570.00-2620.00 MHz			1.5:1	2.0:1	/

Figure Electrical Characteristics: Frequency response.



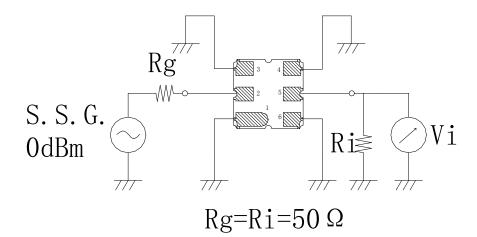


Package & Dimensions



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

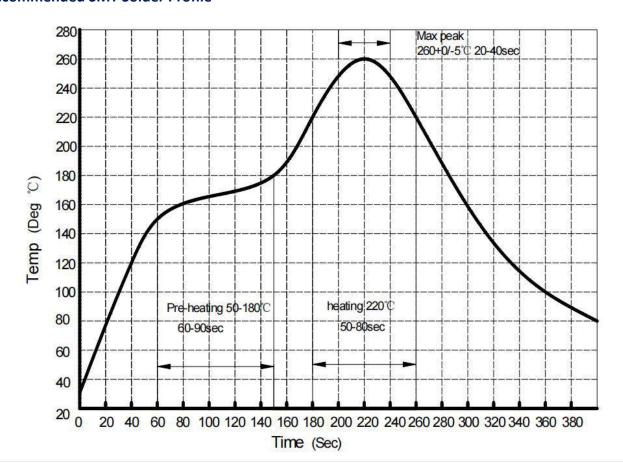
Test circuit



Maximum Ratings

Item		Value	Unit
DC Voltage	V _{DC}	3	V
Operation Temperature	Т	-40 ~ +85	°C
Storage Temperature	T _{stg}	-55 ~ +12 5	°C
RF Power Dissipation	Р	10	dBm

Recommended SMT Solder Profile



Ordering Information

Part Number	Number of Devices	Container
SPT2595M3030A	1000pcs	Tape and Reel

Reliability

No.	Test item	Test condition		
1	Temperature Storage	Temperature: $85^{\circ}C\pm 2^{\circ}C$, Duration: 250h, Recovery time: $20^{\circ}C\pm 2^{\circ}C$, Duration: 250h, Recovery time: $20^{\circ}C\pm 2^{\circ}C$		
2	Humidity Test	Conditions: 60°C±2°C ,90~95% RH Duration: 250h		
3	Thermal Shock	Heat cycle conditions: TA=-55°C±3°C, TB=85°C±2°C, t1=t2=30min, Switch time: ≤3min, Cycle time: 100 times, Recovery time: 2h±0.5h.		
4	Vibration Fatigue	Frequency of vibration: 10~55Hz Amplitude:1.5mm Directions: X,Y and Z Duration: 2h		
5	Drop Test	Cycle time: 10 times Height: 1.0m		
6	Solder Ability Test	Temperature: 245°C±5°C Duration: 3.0s5.0s Depth: DIP2/3 , SMD1/5		
7	Resistance to Soldering Heat	 (1) Thickness of PCB:1mm , Solder condition: 260°C±5°C , Duration: 10±1s (2) Temperature of Soldering Iron: 350°C±10°C, Duration: 3~4s, Recovery time : 2 ± 0.5h 		

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