



Data Sheet
847MHz SAW 3030
SPT847M3030A

V1.0

Description:

The Spectron SPT847M3030A is a SAW filter that work frequency ranges from 832 to 862MHz. It is designed for applications in IOT equipments and Information & Communications filed.

The SPT847M3030A provides +20 dBm power handling, low insertion loss and high out of band rejection.

The design and manufacturing of the SPT847M3030A exploit Spectron's exclusive TSAW technology to deliver competitive performance against state of the art at a low cost.

The SPT847M3030A 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 30.0 MHz
- Compact miniature size
 - 3.0 mm \times 3.0 mm footprint
 - 1.25 mm max-height

Applications:

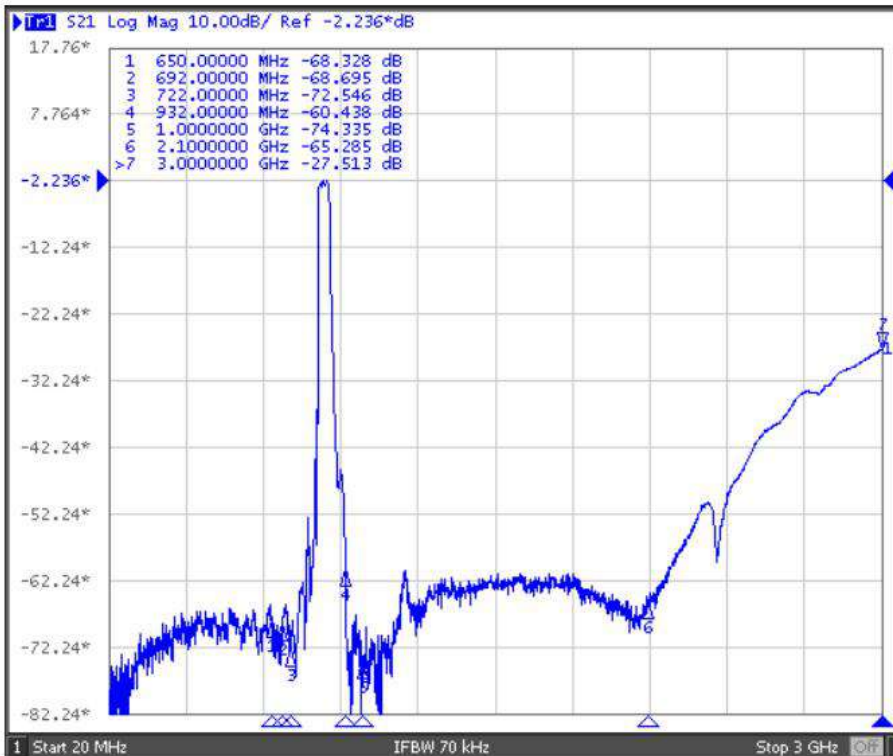
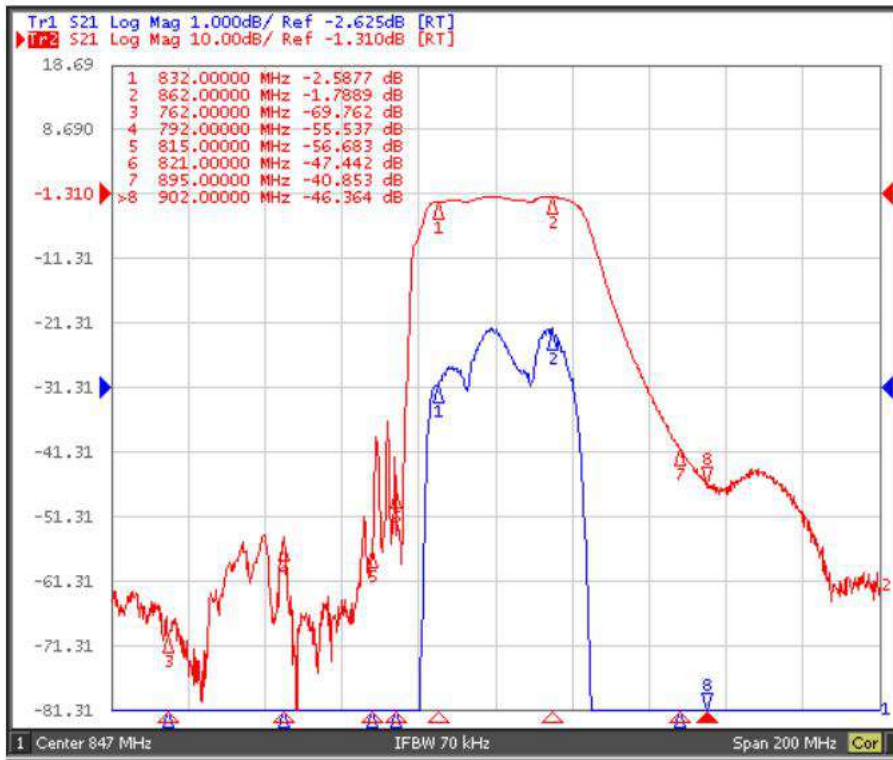
- IOT equipments
- Information & Communications Devices

Electrical Specifications**Table 1** Electrical Specifications.

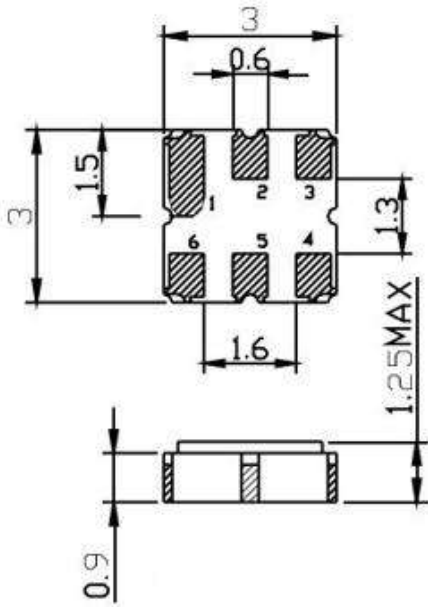
Test Temperature: 25°C±2°C

Item		Minimum	Typical	Maximum	Unit
Center Frequency	fc		847.00		MHz
Insertion Loss(min)	IL		1.5	2.0	dB
Insertion Loss 832.00 - 862.00MHz	IL		2.6	4.0	dB
Amplitude Ripple (p-p) 832.00 - 862.00MHz	$\Delta\alpha$		1.0	2.0	dB
Group Delay Ripple 832.00 - 862.00MHz	GDR		40.0	100.0	ns
Absolute Attenuation	α				
20.00 - 650.00 MHz		50.0	55.0		dB
692.00 - 722.00 MHz		50.0	55.0		dB
762.00 - 792.00 MHz		45.0	50.0		dB
792.00 - 821.00 MHz		30.0	35.0		dB
902.00 - 932.00 MHz		35.0	40.0		dB
1000.00 - 3000.00 MHz		20.0	25.0		dB
Return Loss within 832.00 - 862.00MHz		9.5	11.0		dB

Figure 1 Electrical Characteristics: Frequency response.

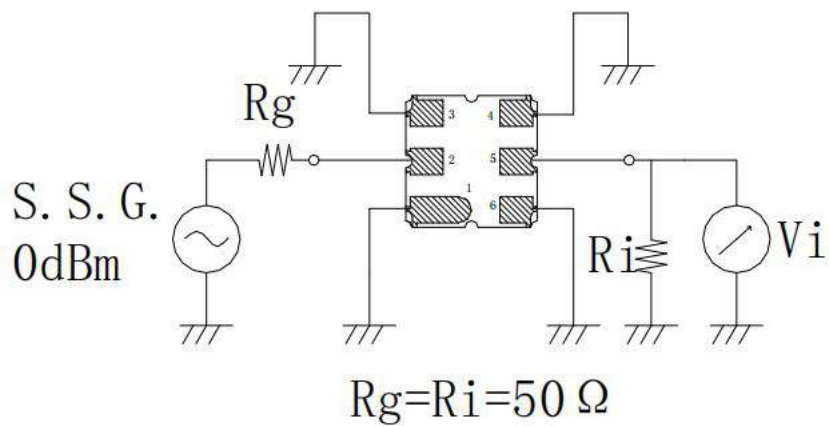


Package & Dimensions



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

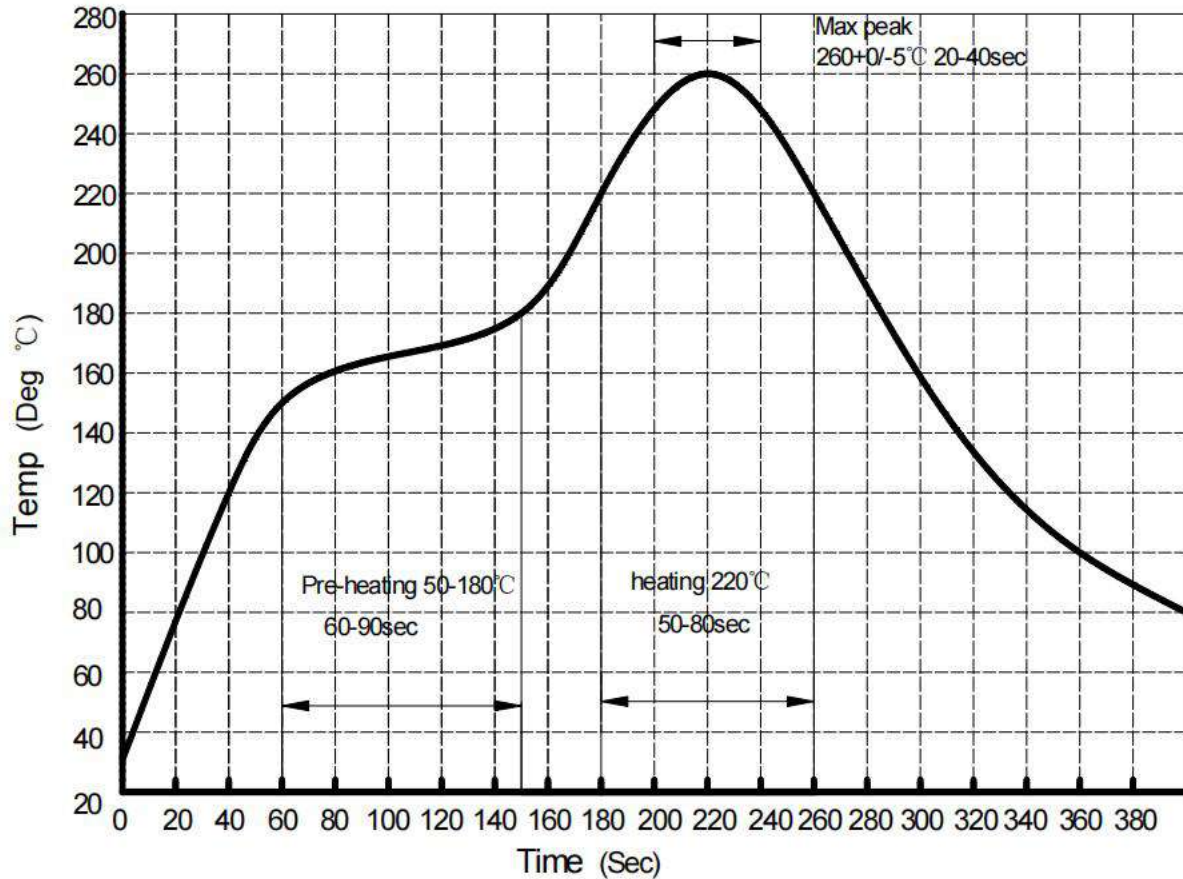
Test circuit



Maximum Ratings

Item		Value	Unit
Operation Temperature	T	-40 ~ +85	°C
Storage Temperature	T _{stg}	-40 ~ +125	°C
RF Power Dissipation	P	20	dBm

Recommended SMT Solder Profile



Ordering Information

Part Number	Number of Devices	Container
SPT847M3030A	1000pcs	Tape and Reel

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