



Data Sheet
1250MHz SAW 3030
SPT1250M3030A

V1.0

Description:

The Spectron SPT1250M3030A is a SAW filter designed for applications in RF module, IOT equipments and Information& Communications filed.

The SPT1250M3030A provides +20dBm power handling, low insertion loss and high out of band rejection.

The design and manufacturing of the SPT1250M3030A exploit Spectron's exclusive TSAWtechnology to deliver competitive performance against state of the art at a low cost.

SPT1250M3030A is compatible with high volume, lead-free SMT soldering processes.

Features:

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

Specifications:

- Operation Temperature:-40°C to +85°C
- Usable passband 45MHz
- Compact miniature size
 - 3.0 mm \times 3.0 mm footprint
 - 1.25mm max-height

Applications:

- RF module
- IOT equipments
- Information& Communications Devices

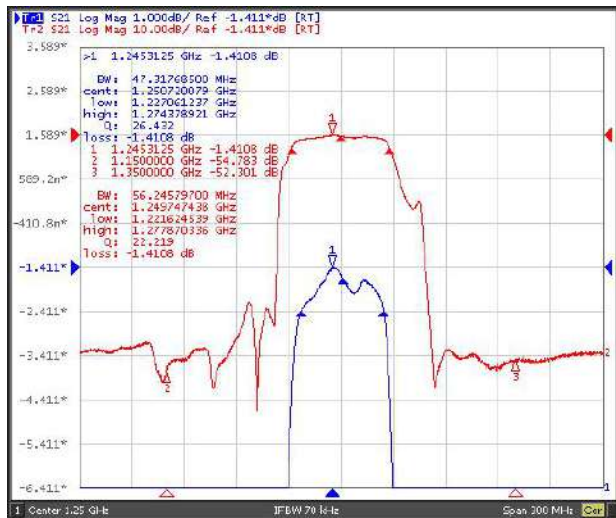
Electrical Specifications**Table 1** Electrical Specifications.

Test Temperature: 25°C±2°C

Item		Minimum	Typical	Maximum	Unit
Center Frequency	f_c		1250.00		MHz
Insertion Loss(min)	IL		1.4	3.0	dB
Amplitude Ripple (p-p)	$\Delta\alpha$		0.8	1.0	dB
-1dB Bandwidth	BW1dB	45.0	47.3		MHz
-3dB Bandwidth	BW3dB		56.2	62.0	MHz
Shape Factor (BW_{40dB}/BW_{1dB})	/		1.9	2.5	/
Absolute Attenuation	α				
DC – 1150.00 MHz		35.0	45.0		dB
1350.00 – 1800.00 MHz		35.0	45.0		dB
1800.00 – 3000.00 MHz		30.0	38.0		dB
VSWR			1.8:1	2.0:1	/

Figure 1 Electrical Characteristics: Frequency response.

Frequency Response



Frequency Response (wideband)

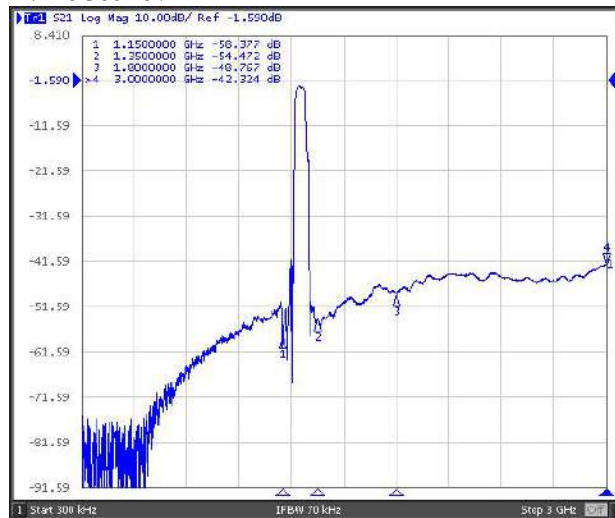
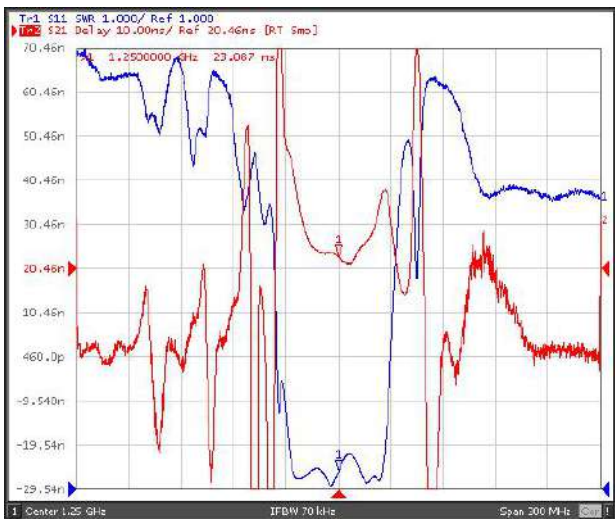
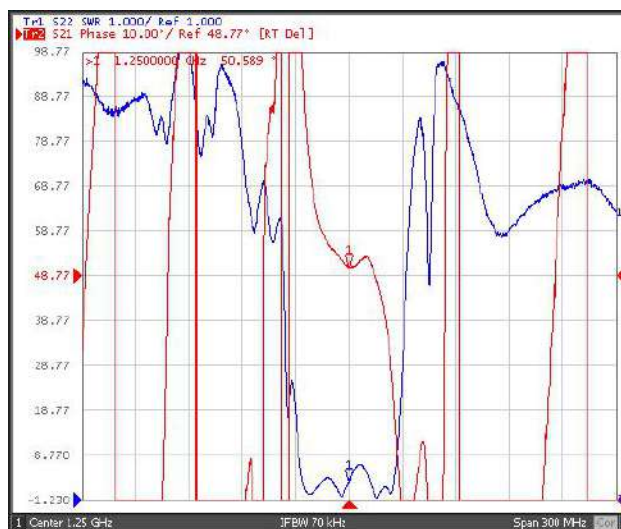


Figure 2 Electrical Characteristics: Delay Ripple & Phase Linearity & VSWR.

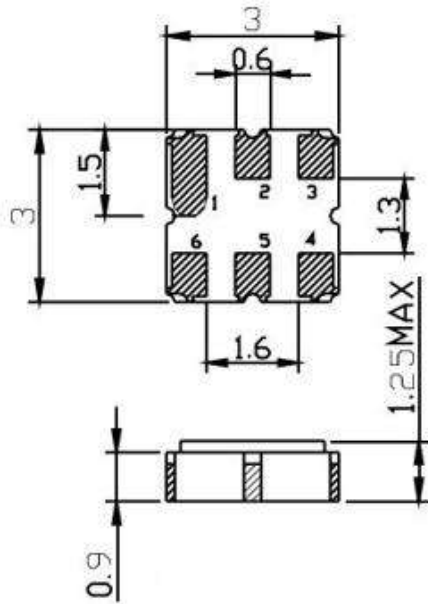
Delay Ripple & S11 VSWR



Phase Linearity & S22 VSWR

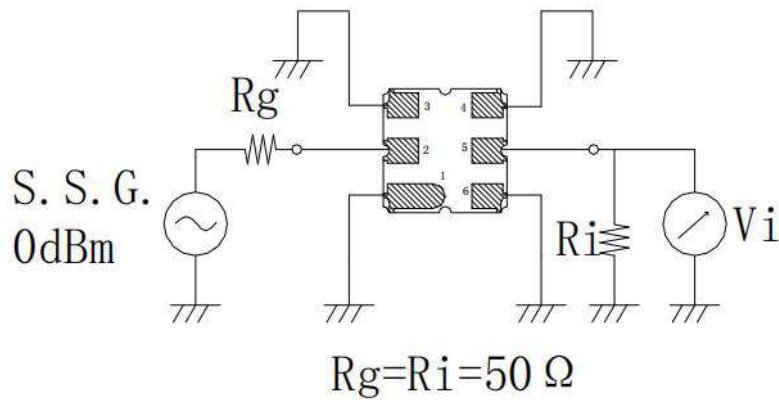


Package & Dimensions



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

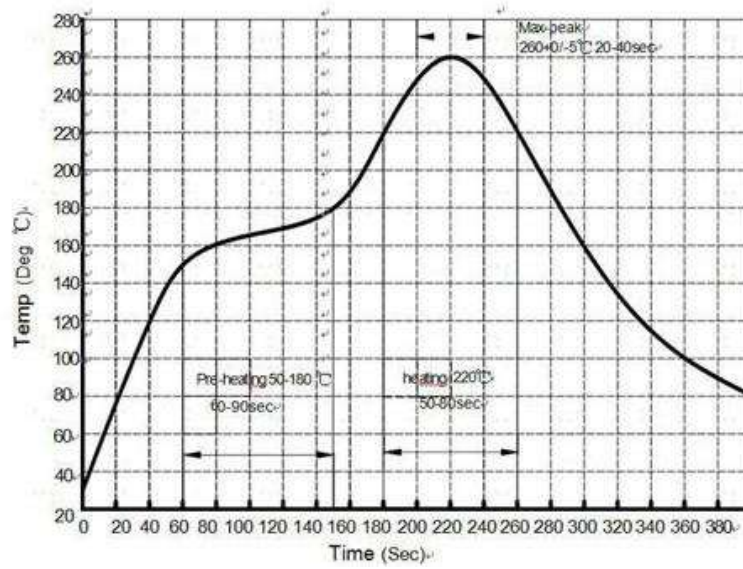
Test circuit



Maximum Ratings

Item		Value	Unit
DC Voltage	V _{DC}	5	V
Operation Temperature	T	-40 ~ +85	°C
Storage Temperature	T _{stg}	-40 ~ +85	°C
RF Power Dissipation	P	20	dBm

Recommended SMT Solder Profile



Ordering Information

Part Number	Number of Devices	Container
SPT1250M3030A	1000pcs	Tape and Reel

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