



Data Sheet
782.5MHz SAW 3030
SPT782M30E

V1.0

Features:

- Ceramic Package for Surface Mounted Technology (SMT)
- RoHS compatible
- Package size 3.00x3.00x1.25mm³
- Electrostatic Sensitive Device(ESD)

Specifications:

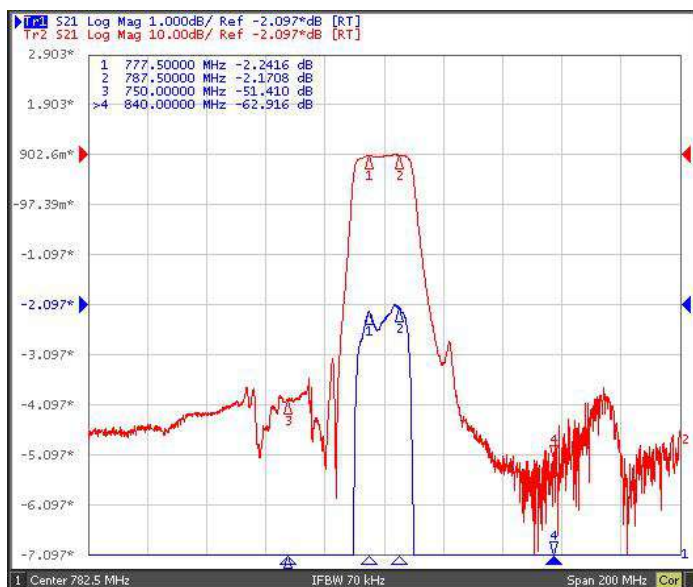
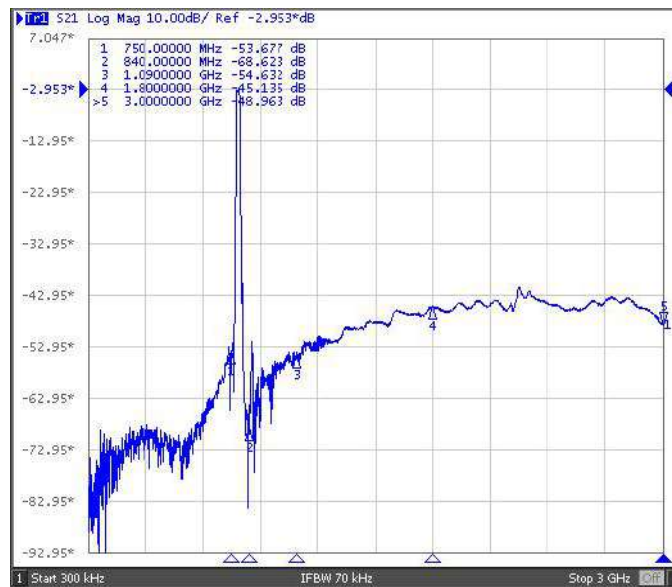
- Operation Temperature:-40°C to +85°C
- Compact miniature size
 - 3.0 mm × 3.0 mm footprint
 - 1.25 mm max-height

Applications:

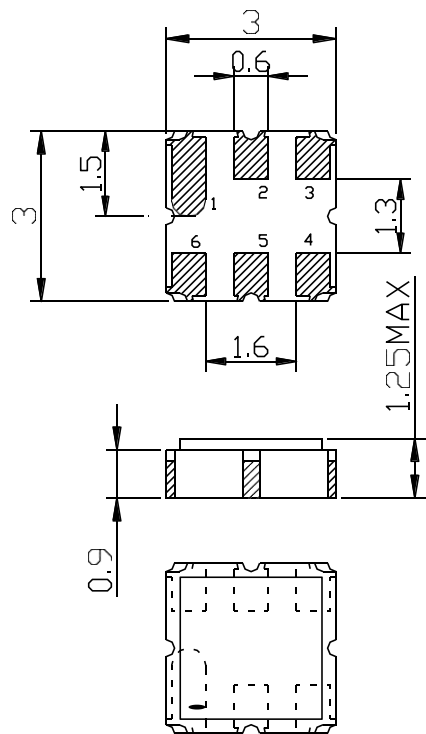
- Low-loss SAW component
- Low amplitude ripple
- Sharp rejections at both out-bands
- Usable passband 10.0 MHz

Electrical Specifications. Test Temperature: 25°C±2°C

Item		Minimum	Typical	Maximum	Unit
Center Frequency	fc		782.50		MHz
Insertion Loss(min)	IL		2.1	2.5	dB
Insertion Loss	777.50 - 787.50 MHz		2.3	3.0	dB
Amplitude Ripple (p-p)	777.50 - 787.50 MHz	$\Delta\alpha$	0.6	1.0	dB
Group Delay Ripple	777.50 - 787.50 MHz		20.0	60.0	ns
Absolute Attenuation	α				
	DC- 750.00 MHz	40.0	45.0		dB
	840.00 - 1090.00 MHz	45.0	50.0		dB
	1090.00 - 1800.00 MHz	40.0	43.0		dB
	1800.00 - 3000.00 MHz	35.0	40.0		dB
Input VSWR	777.50 - 787.50 MHz		1.6:1	2.0:1	
Output VSWR	777.50 - 787.50 MHz		1.6:1	2.0:1	

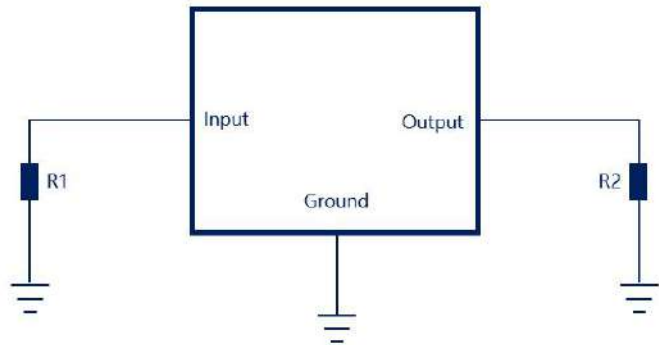
Frequency Characteristics.**Frequency Response****Frequency Response (wideband)**

Package & Dimensions



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

Matching



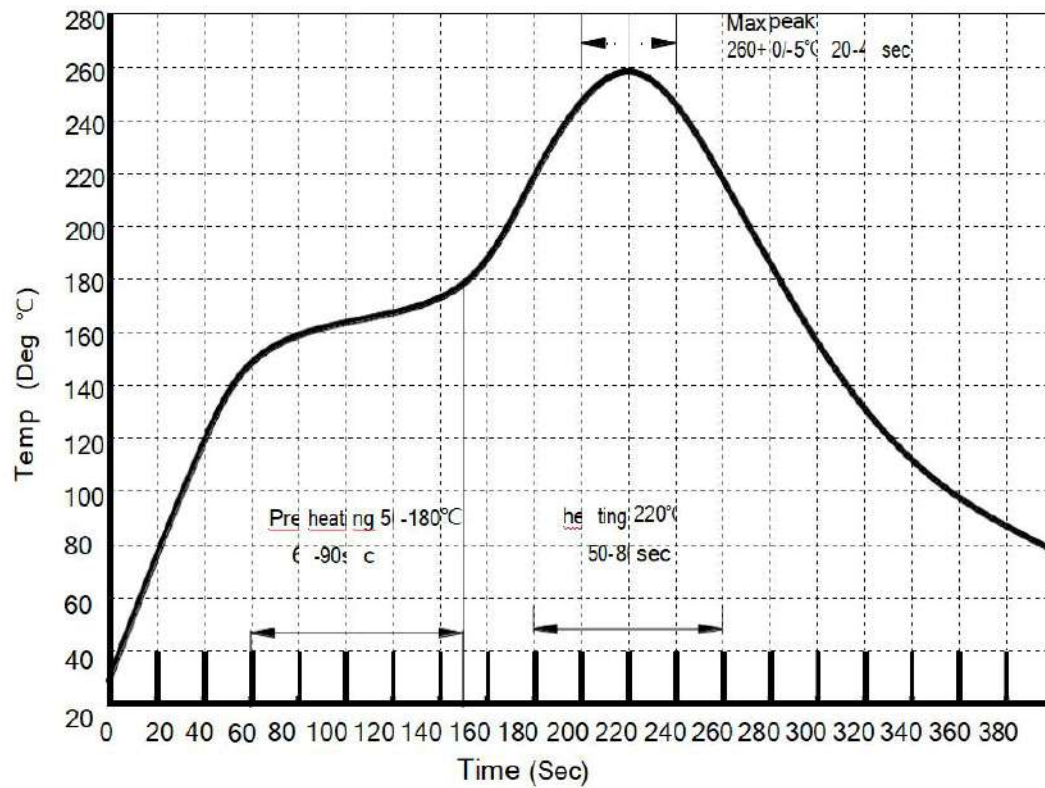
Port	Matching Component ¹
Input	R1: 50Ω
Output	R2: 50Ω

Matching component values shown are recommended based on the Spectron evaluation board. Value adjustment may be required on the end-user's circuit boards for the selected component manufacturer and PCB material.

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 Reflow Soldering Diagram



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