



**Data Sheet**  
**798MHz SAW 3838**  
**SPT798M38E**

V1.0

**Features:**

- Ceramic Package for Surface Mounted Technology (SMT)
- RoHS compatible
- Package size 3.80x3.80x1.50mm<sup>3</sup>
- Electrostatic Sensitive Device(ESD)

**Specifications:**

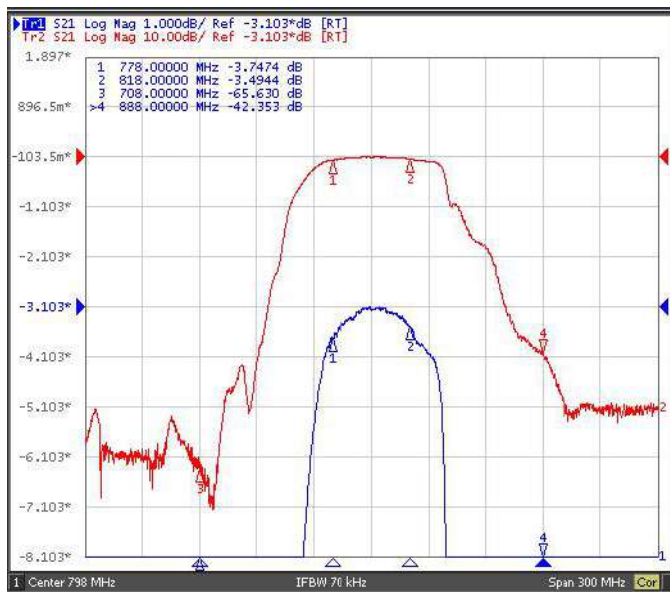
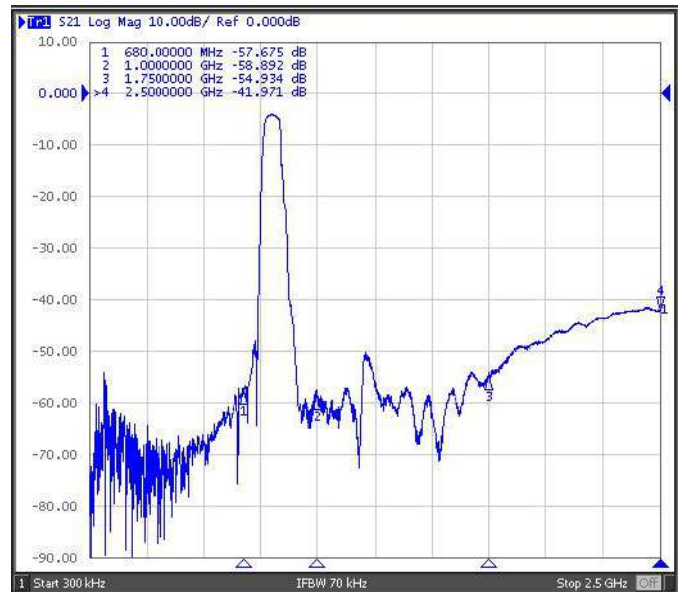
- Operation Temperature:-40°C to +85°C
- Compact miniature size
  - 3.8 mm × 3.8 mm footprint
  - 1.50 mm max-height

**Applications:**

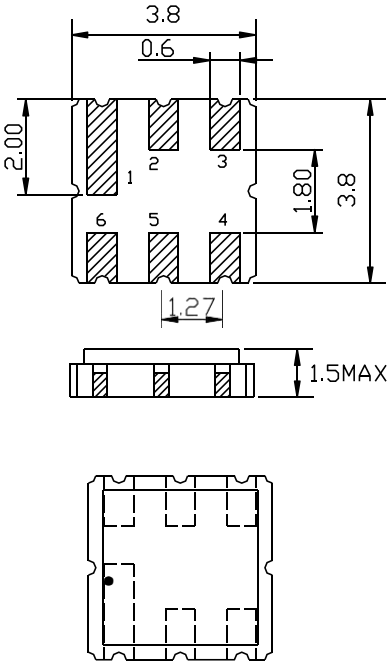
- Low-loss SAW component
- Low amplitude ripple
- Sharp rejections at both out-bands
- Usable passband 40.0 MHz

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

Item		Minimum	Typical	Maximum	Unit
Center Frequency	fc		798.00		MHz
Insertion Loss(min)	IL		3.0	4.0	dB
Insertion Loss	778.00 - 818.00 MHz		3.8	5.0	dB
Amplitude Ripple (p-p)	778.00 - 818.00 MHz	$\Delta\alpha$	1.0	2.0	dB
Group Delay Ripple	778.00 - 818.00 MHz	GDR	20.0	50.0	ns
Absolute Attenuation	$\alpha$				
	DC - 700.00 MHz	40.0	45.0		dB
	900.00 - 1000.00 MHz	40.0	45.0		dB
	1000.00 - 1500.00 MHz	40.0	45.0		dB
Input VSWR	778.00 - 818.00 MHz		1.4:1	2.0:1	/
Output VSWR	778.00 - 818.00 MHz		1.4:1	2.0:1	/

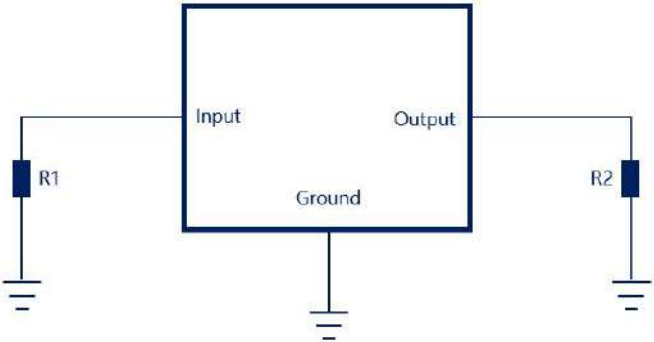
**Frequency Characteristics.****Frequency Response****Frequency Response (wideband)**

Package & Dimensions



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

Matching



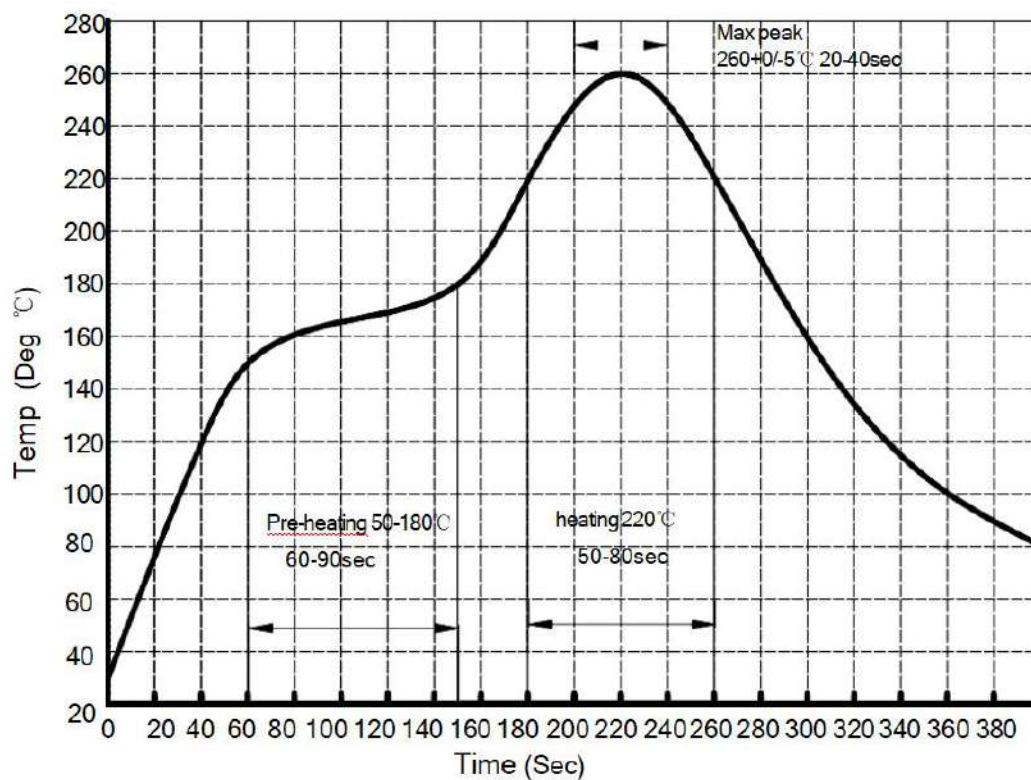
Port	Matching Component <sup>1</sup>
Input	R1: 50Ω
Output	R2: 50Ω

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 <sub>DC</sub>	3	V
Operation Temperature	T	-40 ~ +85	°C
Storage Temperature	T <sub>stg</sub>	-40 ~ +85	°C
RF Power Dissipation	P	10	dBm

## Recommended Reflow Soldering Diagram



## Ordering Information

Part Number	Number of Devices	Container
SPT798M38E	1000pcs	Tape and Reel

