APPROVAL SHEET

SHENZHEN PUWEI TECHNOLOGY CO.,LTD.







Product Description: SAW Filter 2492 MHz SMD 3.0×3.0mm (BW=10 MHz)

Part No.	PV4T92
Pages	7
Date	2019/07/20
Revision	1.0

Prepared by:	3,9000
Checked by:	张扬
Approved by:	4837







History Record

Date	Part No.	Version No.	Modify Content	Remark

Application

- Low-loss SAW component
- Low amplitude ripple
- Sharp rejections at both out-bands
- Usable passband 10 MHz

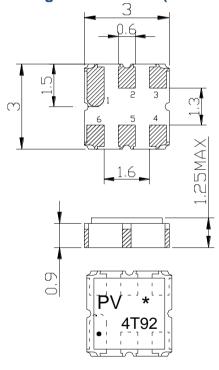
Features

- RoHS compatible
- Package size 3.00x3.00x1.25mm³
- Package Code DCC6C
- Electrostatic Sensitive Device(ESD)

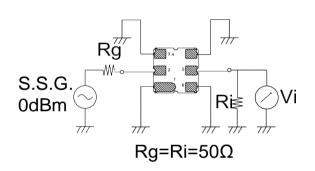
Maximum Rating

Item	Value	Unit	
DC Voltage	V _{DC}	5	V
Operation Temperature	Т	-40 ~ +85	°C
Storage Temperature	T _{stg}	-55 ~ +125	°C
RF Power Dissipation	Р	20	dBm

Package Dimensions (Unit: mm)



Test Circuit (Bottom View)



Pin Configuration

2	Input
5	Output
1, 3, 4, 6	Ground

■ Top View, Laser Marking

"PV": Manufacturer's mark "4T92": Part number "•": Terminal 1

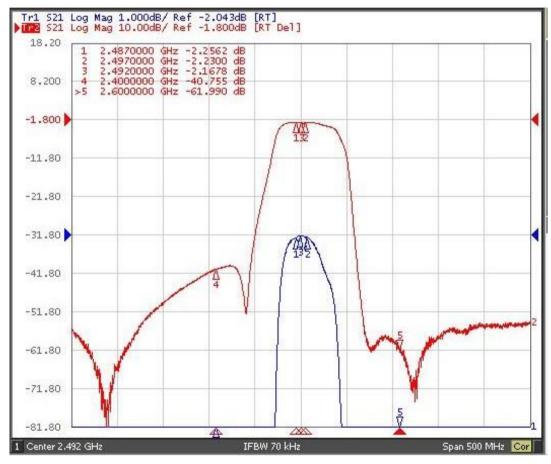
"*": Lot number (The code shown below varies in a 4-year cycle)

1	2	3	4	5	6	7	8	9	10	11	12
а	b	С	d	е	f	g	h	i	j	k	m
n	р	q	r	S	t	u	٧	W	Х	У	Z
Α	В	С	D	Е	F	G	Н	J	K	L	М
N	Р	Q	R	S	Т	U	V	W	Х	Υ	Z

Electronic Characteristics Test Temperature: $25^{\circ}C \pm 2^{\circ}C$ Terminating source impedance: 50Ω

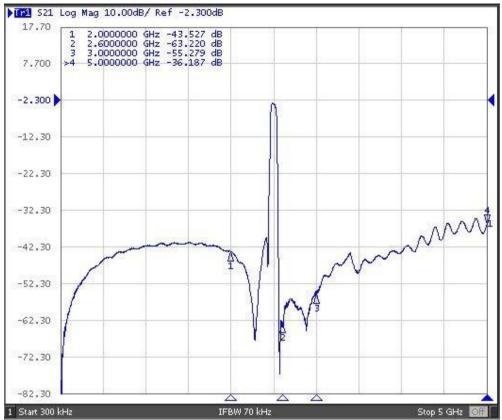
Item		Minimum	Typical	Maximum	Unit
Center Frequency	fc		2492.00		MHz
Insertion Loss(min)	IL		2.0	2.5	dB
Insertion Loss 2487.00 – 2497.00MHz	IL		2.2	3.0	dB
Amplitude Ripple (p-p) 2487.00 – 2497.00MHz	Δα		0.4	1.0	dB
Group Delay Ripple 2487.00 – 2497.00MHz	GDR		10.0	30.0	ns
DC - 1000.00 MHz		30.0	35.0		dB
1000.00 - 1616.00 MHz		30.0	35.0		dB
1616.00 - 2400.00 MHz		32.0	37.0		
2600.00 - 3000.00 MHz		45.0	50.0		dB
3000.00 - 5000.00 MHz		15.0	20.0		dB
Input VSWR 2487.00 – 2497.00MHz			1.7:1	2.0:1	/
Output VSWR 2487.00 – 2497.00MHz			1.7:1	2.0:1	/

Frequency Characteristics

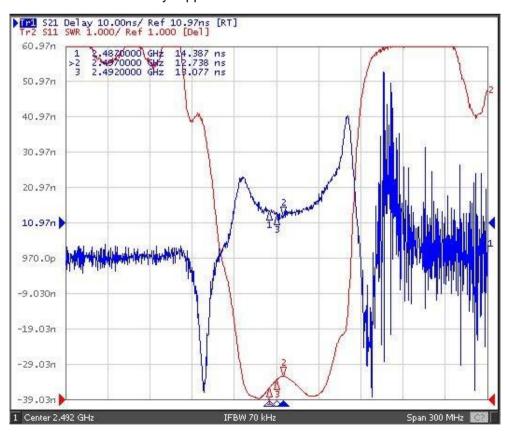


Frequency Characteristics

Frequency Response (wideband)



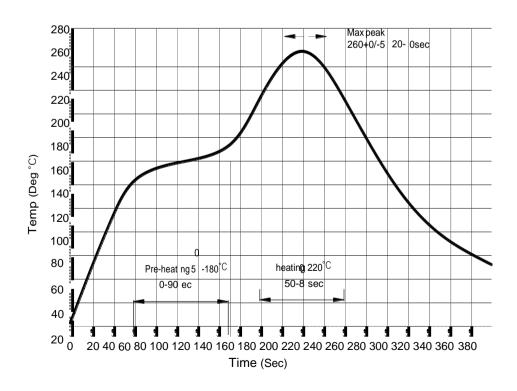
Delay Ripple & S11 VSWR



Reliability (The SAW components shall remain electrical performance after tests)

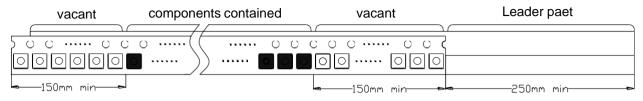
No.	Test item	Test condition
1	Temperature Storage	(1) Temperature: 85°C±2°C, Duration: 250h, Recovery time: 2h±0.5h (2) Temperature: -55°C±3°C, Duration: 250h, Recovery time: 2h±0.5h
2	Humidity Test	Conditions: 60°C±2°C , 90~95% RH
3	Thermal Shock	Heat cycle conditions: TA=-55°C±3°C, TB=85°C±2°C, t1=t2=30min, 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

Recommended Reflow Soldering Diagram



Packing Information

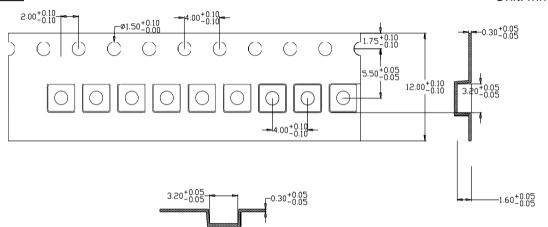
Carrier Tape



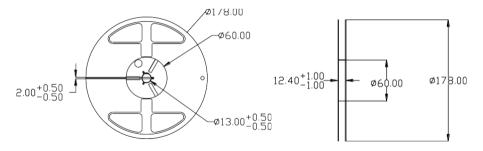
TAPE RUNNING DIRECTION

Reel Dimensions





Outer Packing Unit: mm



Notes

- 1. As a result of the particularity of inner structure of SAW products, it easy to be breakdown by electrostatic, so we should pay attention to **ESD protect** in the test.
- 2. **Static voltage** between signal load and ground may cause deterioration and destruction of the component. Please avoid static voltage.
- 3. **Ultrasonic cleaning** may cause deterioration and destruction of the component. Please avoid ultrasonic cleaning.
- 4. Only leads of component may be soldered. Please avoid soldering another part of component.
- 5. There is a close relationship between the device's performance and **matching network**. The specifications of this device are based on the test circuit shown above. L and C values may change depending on board layout. Values shown are intended as a guide only.