APPROVAL SHEET

SHENZHEN PUWEI TECHNOLOGY CO.,LTD.

PURE-V TECH

CHINA

Product Description: SAW Filter 1568 MHz SMD 3.00×3.00×1.25mm（BW=35 MHz）

Part No.	PV5G68D
Pages	7
Date	2023/02/15
Revision	1.0

RoHS compliance Pb Pb free REACH

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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 35 MHz

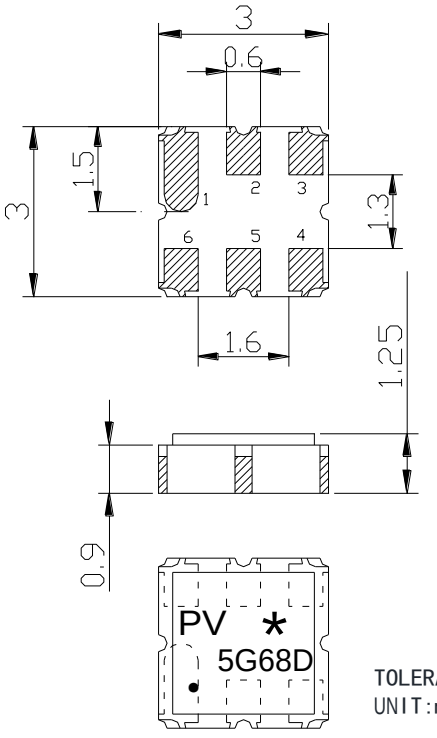
Features

- RoHS compatible
- Package size 3.00x3.00x1.25mm^3
- Package Code DCC6C
- Electrostatic Sensitive Device(ESD)

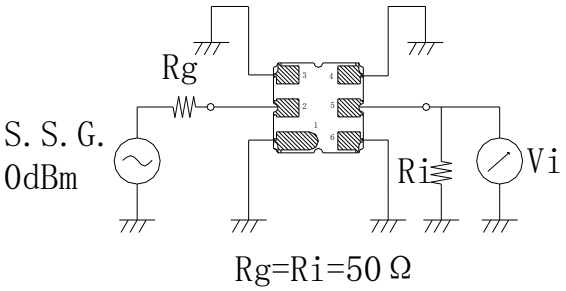
Maximum Rating

Item		Value	Unit
DC Voltage	V_{DC}	3	V
Operation Temperature	T	-40 ~ +85	℃
Storage Temperature	T_{stg}	-55 ~+125	℃
RF Power Dissipation	P	10	dBm

Package Dimensions (Unit: mm)



Test Circuit（Bottom View）



Pin Configuration

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

- Top View, Laser Marking

- "**PV**": Manufacturer's mark " **5G68D** ": Part number "·": Terminal 1
- "＊": Lot number (The code shown below varies in a 4-yearcycle)

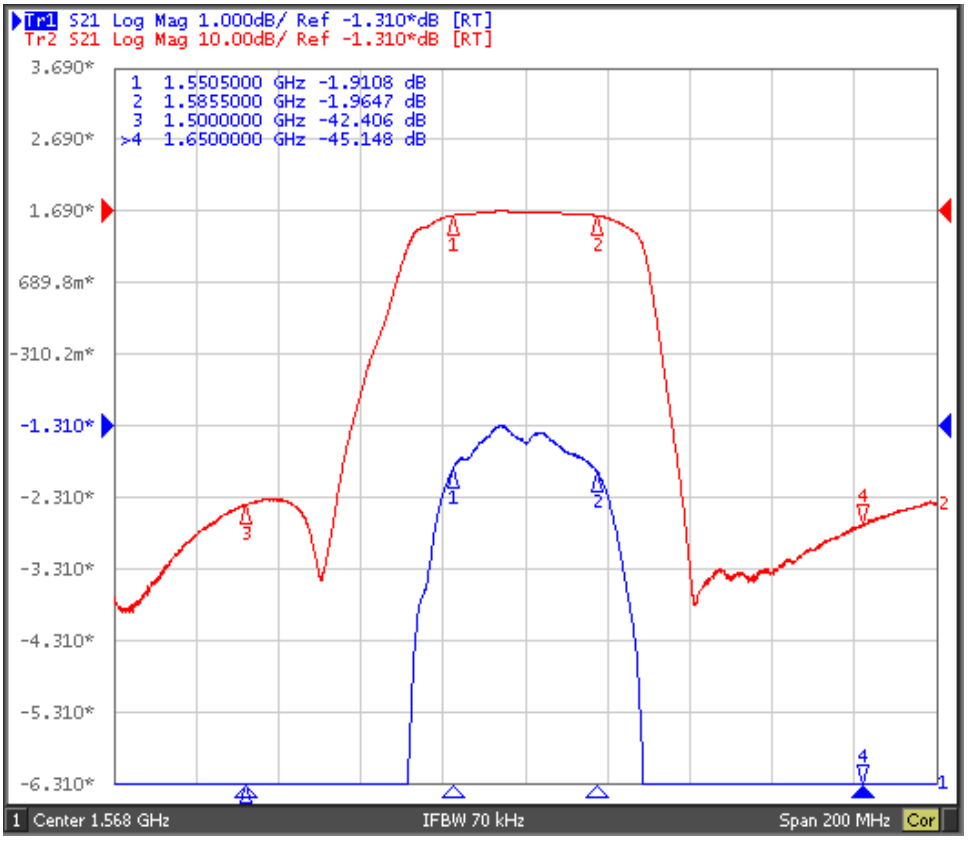
Code	1	2	3	4	5	6	7	8	9	10	11	12
2021	a	b	c	d	e	f	g	h	i	j	k	m
2022	n	p	q	r	s	t	u	v	w	x	y	z
2023	A	B	C	D	E	F	G	H	J	K	L	M
2024	N	P	Q	R	S	T	U	V	W	X	Y	Z

Electronic Characteristics

Test Temperature: 25℃±2℃ Terminating source impedance: 50Ω

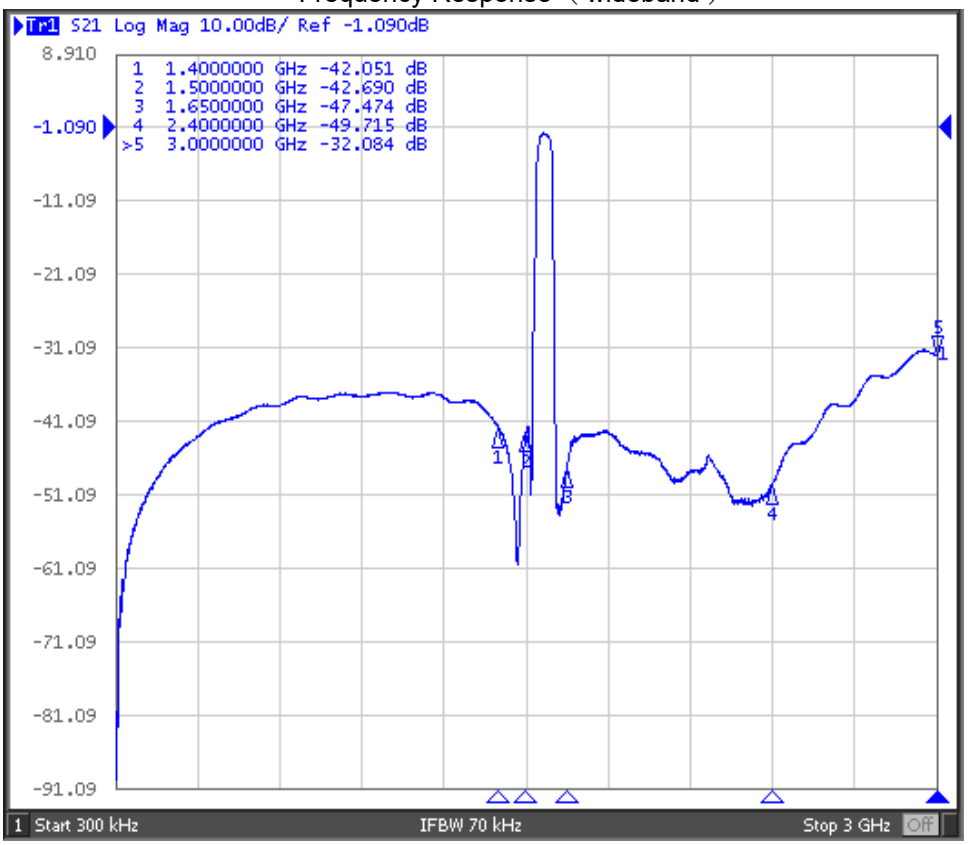
Item		Minimum	Typical	Maximum	Unit
Center Frequency	fc		1568.00		MHz
Insertion Loss(min)	IL		1.5	2.0	dB
Amplitude Ripple (p-p) 1550.50 - 1585.50 MHz	△α		0.7	1.4	dB
Group Delay Ripple 1550.50 - 1585.50 MHz	GDR		15.0	30.0	ns
Absolute Attenuation	α				
DC - 1400.00 MHz		32.0	37.0		dB
1400.00 - 1500.00 MHz		35.0	40.0		dB
1650.00 - 2400.00 MHz		35.0	40.0		dB
2400.00 - 3000.00 MHz		25.0	30.0		dB
Input VSWR 1550.50 - 1585.50 MHz			1.5:1	2.0:1	/
Output VSWR 1550.50 - 1585.50 MHz			1.5:1	2.0:1	/

Frequency Characteristics

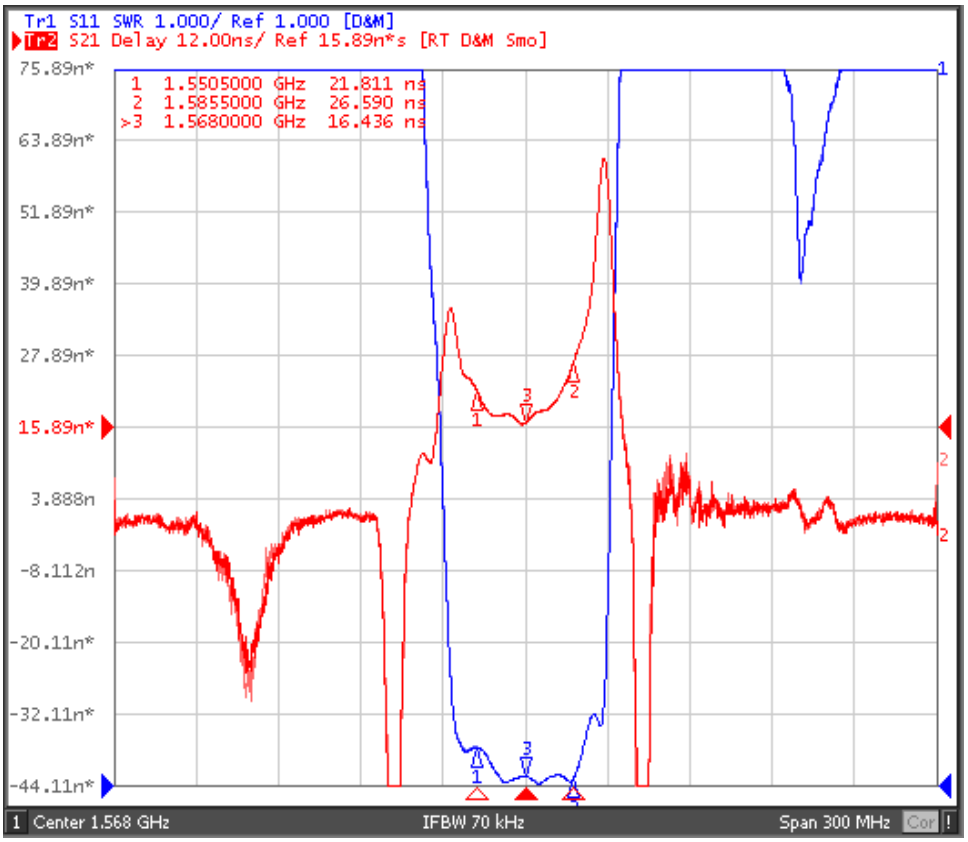


Frequency Characteristics

Frequency Response（wideband）



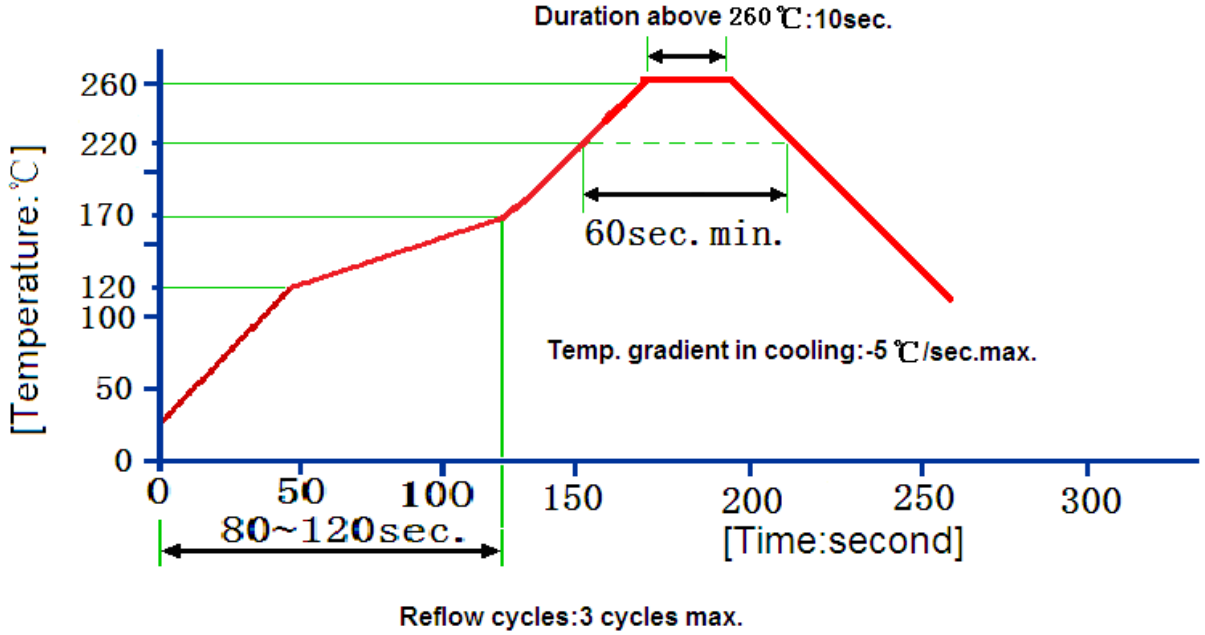
Delay Ripple &S11 VSWR



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

No.	Test item	Test condition
1	Temperature Storage	(1) Temperature: 85℃±2℃ , Duration: 250h , Recovery time:2h±0.5h (2) Temperature: –55℃±3℃ , Duration: 250h ,Recovery time:2h±0.5h
2	Humidity Test	Conditions: 60℃±2℃ ,90~95% RH Duration: 250h
3	Thermal Shock	Heat cycle conditions: TA=-55℃±3℃, TB=85℃±2℃, 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℃±5℃ Duration: 3.0s--5.0s Depth: DIP--2/3 , SMD--1/5
7	Resistance to Soldering Heat	(1) Thickness of PCB:1mm , Solder condition: 260℃±5℃ , Duration: 10±1s (2) Temperature of Soldering Iron: 350℃±10℃, Duration: 3~4s, Recovery time : 2 ±0.5h

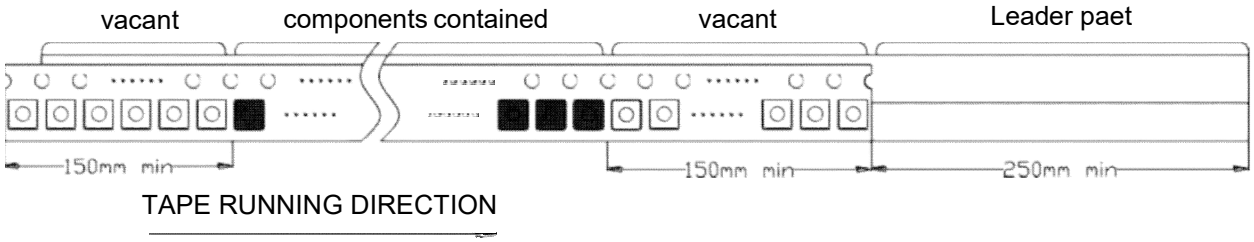
Recommended Reflow Soldering Diagram



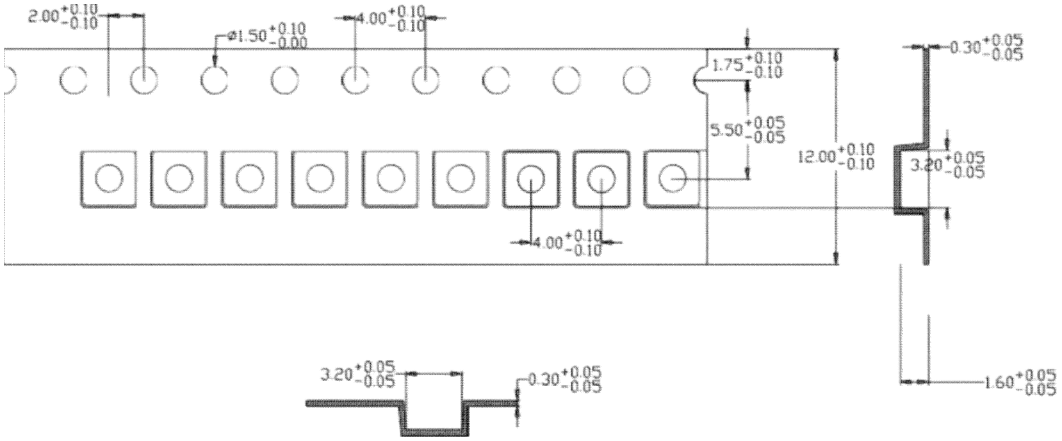
Reflow cycles:3 cycles max.

Packing Information

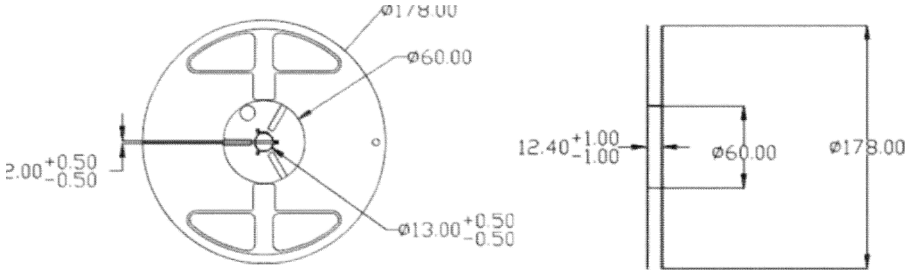
Carrier Tape



Reel Dimensions Unit: mm



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 thetest.
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 ofcomponent.
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.