

# APPROVAL SHEET

SHENZHEN PUWEI TECHNOLOGY CO.,LTD.

PURE-V  
TECH



**Product Description: SAW Filter 70.0 MHz SMD 27.20×12.64x5.50mm (BW=480KHz)**

Part No.	PV0M70N
Pages	7
Date	2020/07/20
Revision	1.0

Prepared by:	邓兆源
Checked by:	张勃
Approved by:	张勃





## Application

- Low-loss SAW component
- Low amplitude ripple
- Sharp rejections at both out-bands
- Usable passband 480 KHz
- Low Shape factor

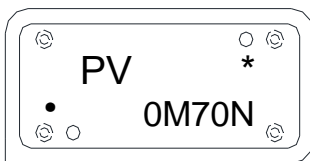
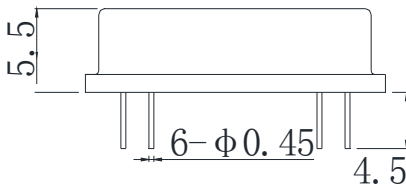
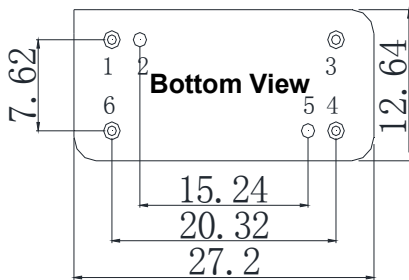
## Features

- RoHS compatible
- Package size 27.20x12.64x5.50mm<sup>3</sup>
- Package Code DIP2712Electrostatic
- SensitiveDevice(ESD)

## Maximum Rating

Item		Value	Unit
DC Voltage	V <sub>DC</sub>	3	V
Operation Temperature	T	-40 ~ +85	°C
Storage Temperature	T <sub>stg</sub>	-55 ~ +125	°C
Input Power Level	P	10	dBm

## Package Dimensions (Unit: mm)

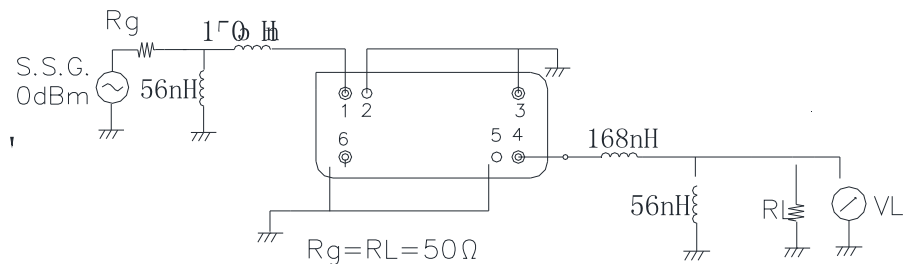


TOLERANCE : ±0.2  
UNIT : mm

- "PV": Manufacturer's mark "OM70N": Part number "·": Terminal 1
- "\*": Lot number (The code shown below varies in a 4-year cycle)

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

## Test Circuit (Bottom View)



## Pin Configuration

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

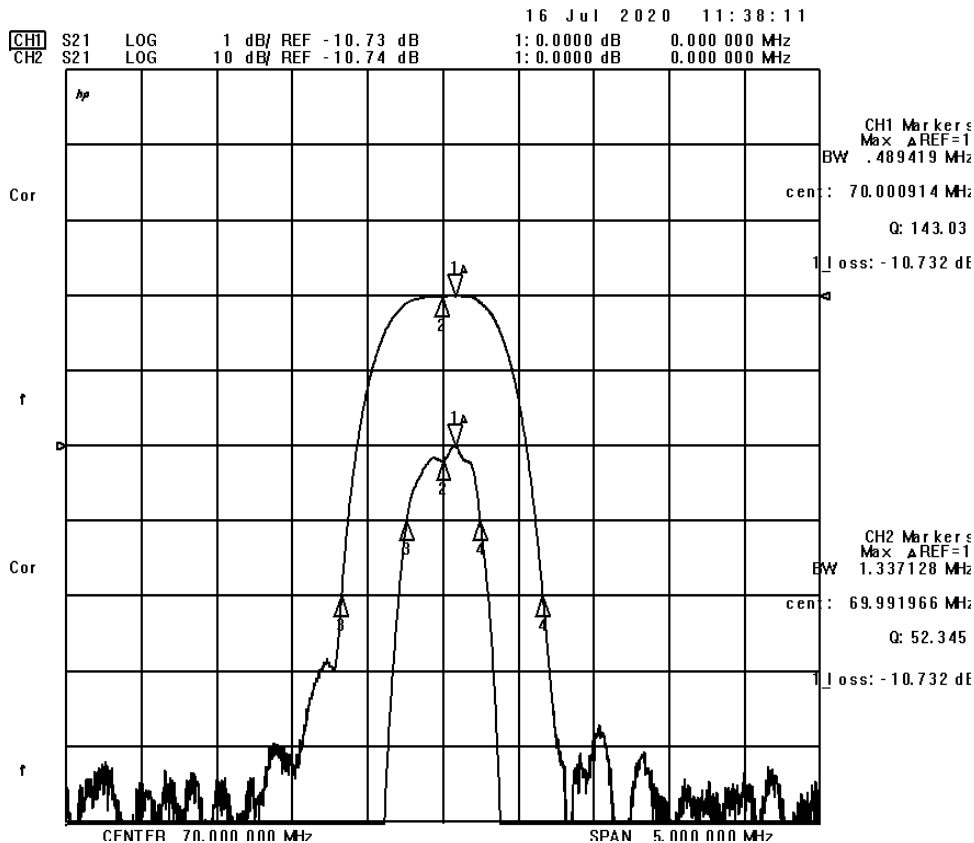
- Top View, Laser Marking

Electronic Characteristics Test Temperature: 25°C ± 2°C

Terminating source impedance: 50 Ω

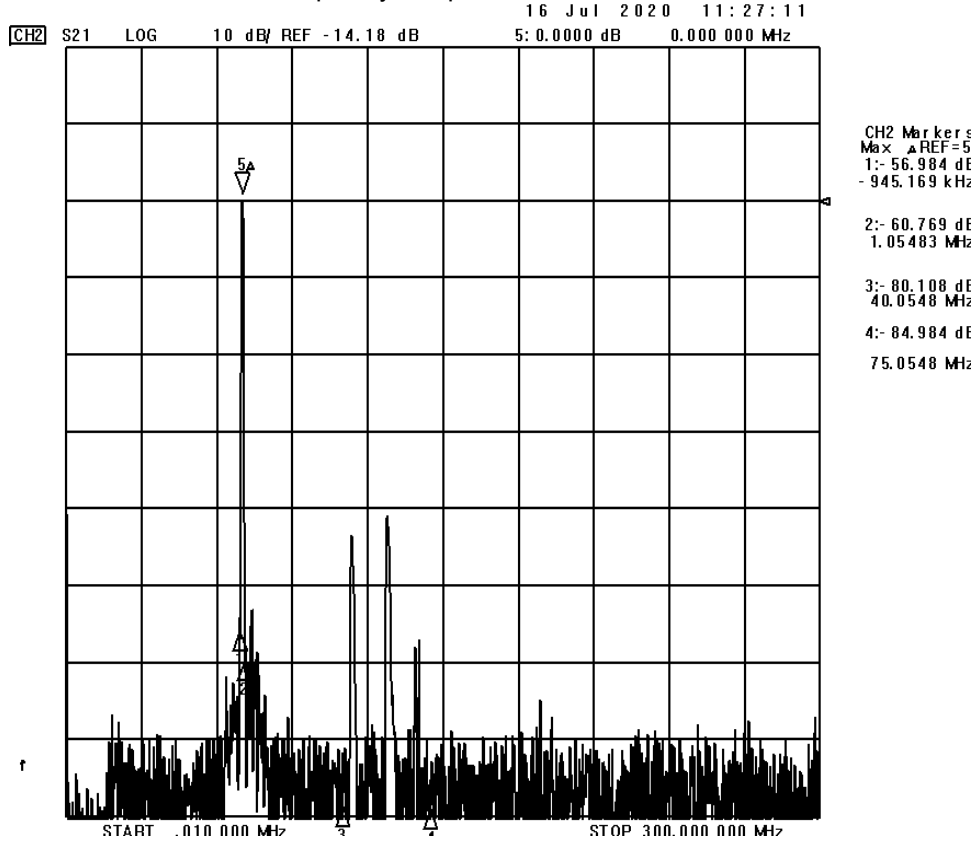
Item		Minimum	Typical	Maximum	Unit
Center Frequency	fc	69.95	70.00	70.05	MHz
Insertion Loss(min)	IL		10.6	12.0	dB
Amplitude Ripple (p-p)	$\Delta\alpha$		0.3	0.5	dB
1 dB Bandwidth	BW <sub>1dB</sub>	480	490		KHz
3 dB Bandwidth	BW <sub>3dB</sub>		678	700	KHz
Shape factor	BW <sub>40dB</sub> /BW <sub>3dB</sub>		2.0	2.5	
Absolute Attenuation	$\alpha$				
	DC - 139.20 MHz	45.0	55.0		dB
	71.00 - 110.00 MHz	40.0	54.0		dB
	110.00-145.00 MHz	35.0	40.0		dB
	145.00-300.00 MHz	40.0	60.0		dB
Input VSWR			1.5		
Output VSWR			1.5	2.5	

## Frequency Characteristics

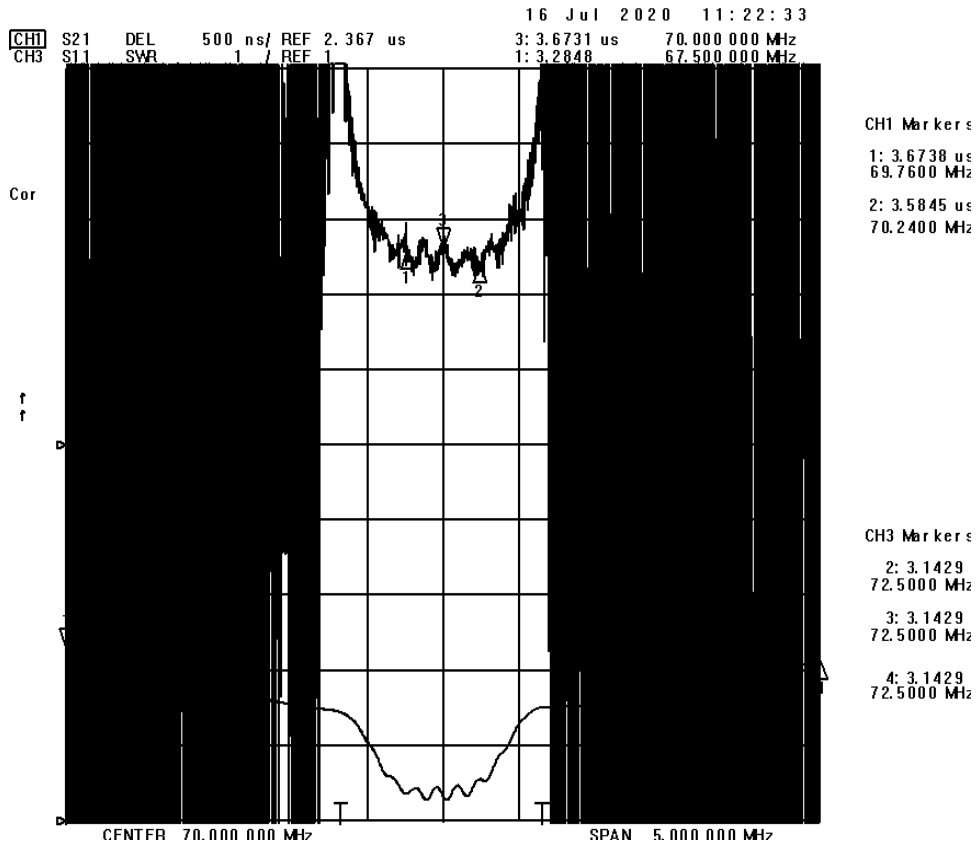


Frequency Characteristics

Frequency Response (wideband)



Delay Ripple & S11 VSWR





## 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.