

Description

RSJP6501P is a WiFi6E filter, which is designed with BAW technology. The product can provide low insertion loss and steep skirt to enables coexistence of 5170-5815MHz signals within the same device or in close proximity to one another. The typical insertion loss in the pass band is less than 2.8dB. Typical rejection at 5170-5815 MHz is more than 55dB.

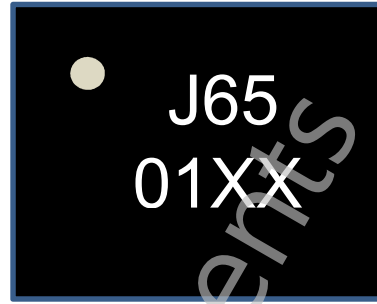
For the chip package, the RSJP6501P uses advanced module packing techniques to achieve the industry standard 1.8 x 1.6 x 0.61mm package, include bumping and flip chip.

Features

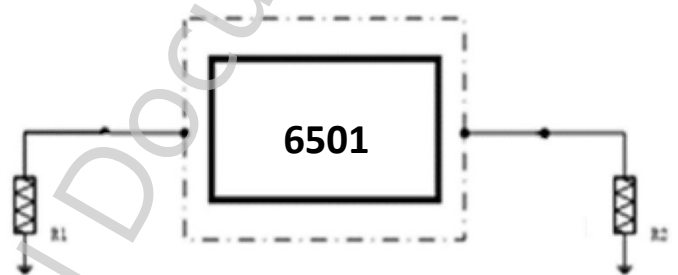
- Miniature Size
1.8 mm x 1.6 mm x 0.61 mm
- Low insertion loss
Passband 5945-7125MHz: 2.8dB Typ.
- High Rejection in 5170-5815MHz
5170-5815MHz: 55dB Typ.
- Tx Input Power
TBD
- ESD protection ability: TBD
- Moisture Sensitivity: MSL3
- Operation Temperature: -20 to +85°C
- Storage Temperature: -40 to +125°C

Environmental

- Full implement with RoHS compliant
- Lead Free (Pb free)



Functional Block Diagram (Top View)



Reference Des.	Value	Description	Manuf.
R1	50ohm		
R2	50ohm		

Pin Connection

No.	Function
1	Ant.
7	TRX
All other	GND

Electrical Specification

Parameter	Min ⁽²⁾	Typ ⁽¹⁾	Max ⁽²⁾	Unit
Insertion Loss (5945~ 7125 MHz) ⁽³⁾	\	2.8	3.3	dB
Ripple (5945 ~ 7125 MHz)	\	1.5	2.0	dB
VSWR (5945 ~ 7125 MHz, Input)	1.8	1.7	\	\
VSWR (5945 ~ 7125 MHz, Output)	1.8	1.7	\	\
Absolute Attenuation				
30 ~ 1000 MHz	40	45	\	dB
1000 ~ 2000 MHz	50	55	\	dB
2100 ~ 2570 MHz	53	58	\	dB
5170 ~ 5815 MHz	52	55	\	dB

(1) Typical value at 25°C

(2) Max/Min value at -20 to +85°C

(3) S-parameter averaged over any 160MHz frequency at room temperature

Typical Performance at Tc=25°C

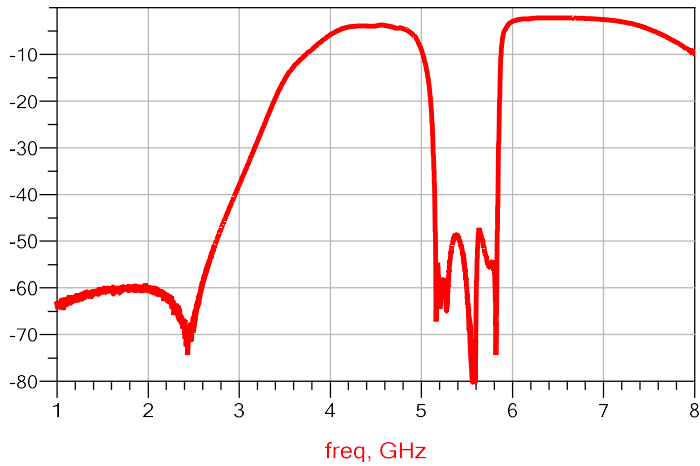


Figure.1 Wideband Attenuation

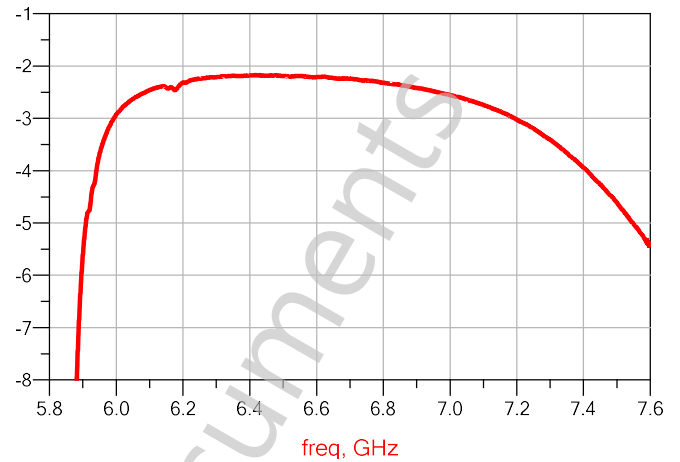


Figure.2 Passband Insertion Loss

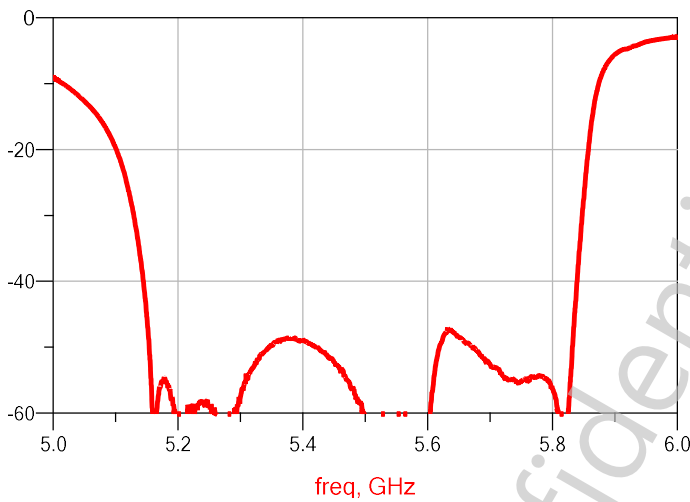


Figure.3 5170-5815MHz Near band

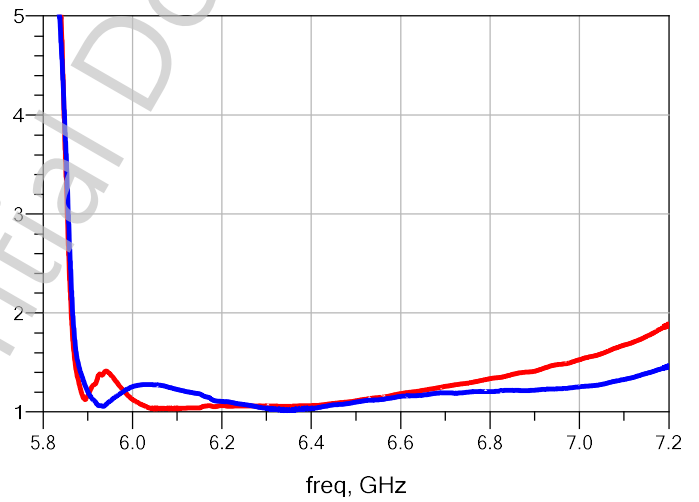


Figure.4 VSWR (VSWR1/VSWR2)

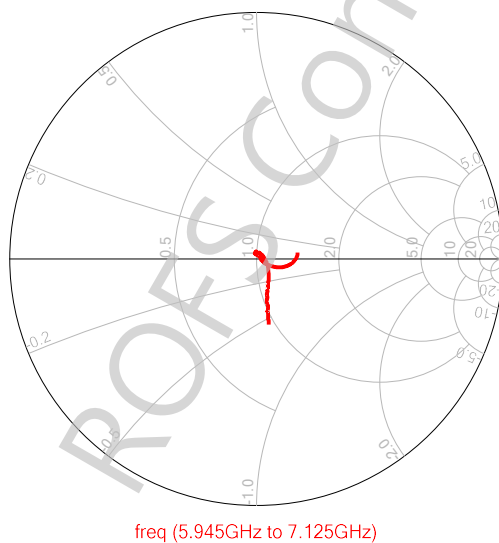


Figure.7 Input Smith chart S11

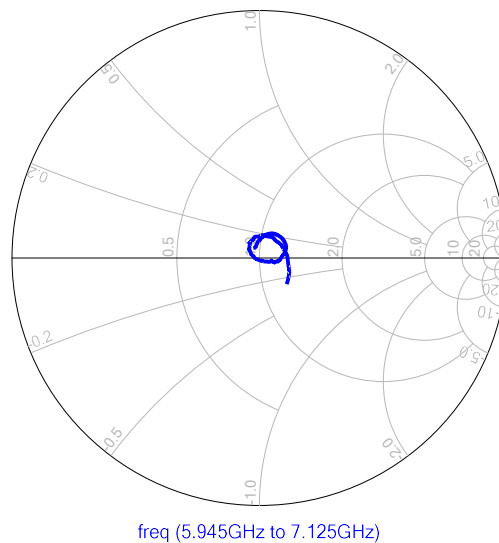
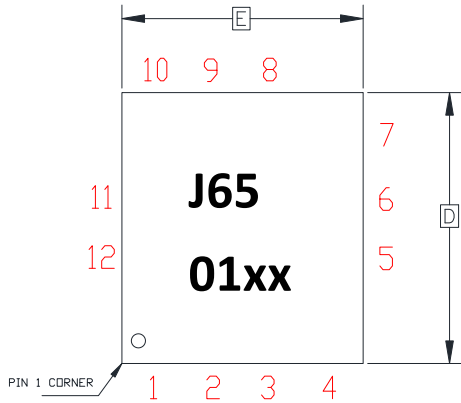
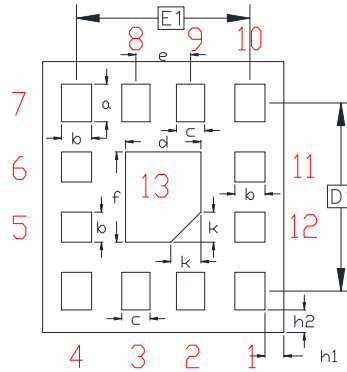


Figure.8 Output Smith chart S22

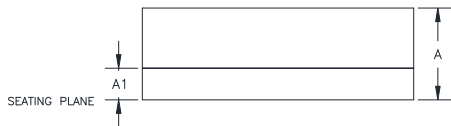
Package Outline



TOP VIEW



BOTTOM VIEW



SIDE VIEW

SYMBOL	MILLIMETER		
	MIN	NOM	MAX
A	0.55	0.61	0.67
A1	0.18	0.21	0.24
D	1.75	1.80	1.85
D1	1.25 BASIC		
E	1.55	1.60	1.65
E1	1.150 BASIC		
e	0.3625 BASIC		
a	0.20	0.25	0.30
b	0.15	0.20	0.25
c	0.1375	0.1875	0.2375
d	0.45	0.50	0.55
f	0.55	0.60	0.65
k	0.200 REF		
h1	0.125 REF		
h2	0.150 REF		

Notes:

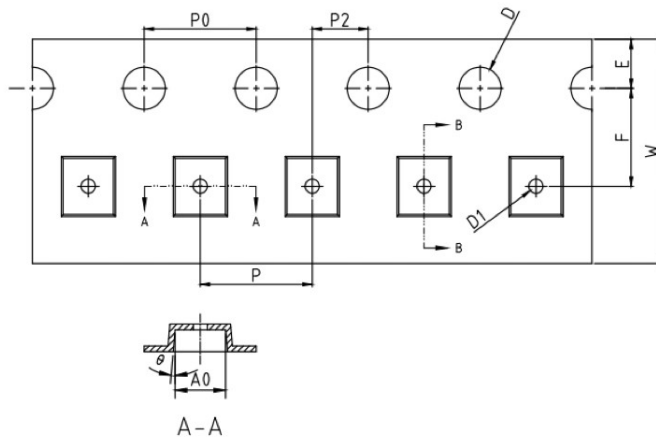
1. Dimension: mm
2. Dimensions nominal unless otherwise noted
3. Contact areas are gold plated
4. J6501 is product code

Pin connection:

- | | |
|-----------|--------|
| 1 | Ant |
| 7 | TRX |
| All other | Ground |

Packing

1. Tape Dimension



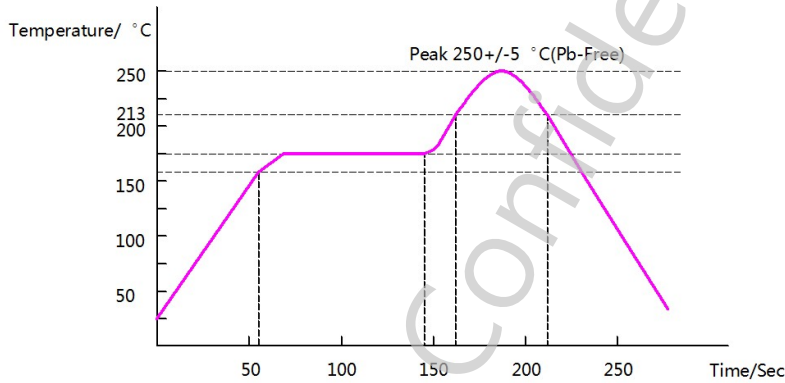
共同尺寸

外观	尺寸 (MM)
E	1.75±0.10
F	3.50±0.05
P ₂	2.00±0.05
D	1.55±0.05
D ₁	0.50±0.05
P ₀	4.00±0.10
10P ₀	40.0±0.20

变动尺寸

外观	尺寸 (MM)
W	8.00 ^{+0.30} _{-0.10}
P	4.00±0.10
A ₀	1.80±0.05
B ₀	2.00±0.05
K ₀	0.78±0.05
t	0.20±0.02
θ	3°TYP

Recommended Reflow Profile



For more information, please contact: rofs_sales1@rofsmicro.com

Notes:

The specification may be changed or the product had been discontinued, please check with our sales or product Engineer before order