

SAW Single Filter

for WIFI / Bluetooth / Unbalanced / 5pin /1411

- **Co-existence of 4G LTE &WIFI signals**
- **High Rejection in B7/B41/B40 bands**

1 Description

SAWF14112G45AT is a high-performance Surface Acoustic Wave (SAW) Bandpass filter optimized for co-existence between cellular 4G/LTE Bands B40, B38, B41, B7, and Wi-Fi/Bluetooth applications operating in the range of 2.4-2.5 GHz license-free ISM band. It is designed to provide both low insertion loss in the Wi-Fi/BT Band and high rejection in the cellular Bands, in order to enable simultaneous operation of Wi-Fi/BT and 4G/LTE within the same device, such as smartphones.

SAWF14112G45AT uses advanced Chip Scale Package (CSP) technology and is housed in an industry standard, 5-pin 1.4mmx1.1mm package with a low profile of 0.6mm max.

2 Features

- Low Insertion Loss: 0.9dB at Mid-Band
- High Rejection in B40/B41/B7
- Small Footprint: $0.325 \pm 0.05\text{mm} \times 0.25 \pm 0.05\text{mm}$.
- Package size $1.4 \pm 0.05\text{mm} \times 1.1 \pm 0.05\text{mm}$
- Electrostatic Sensitive Device(ESD)
- Package height 0.6mm max.
- Single-Ended Operation
- RoHS Compliant

3 Package & Dimensions:

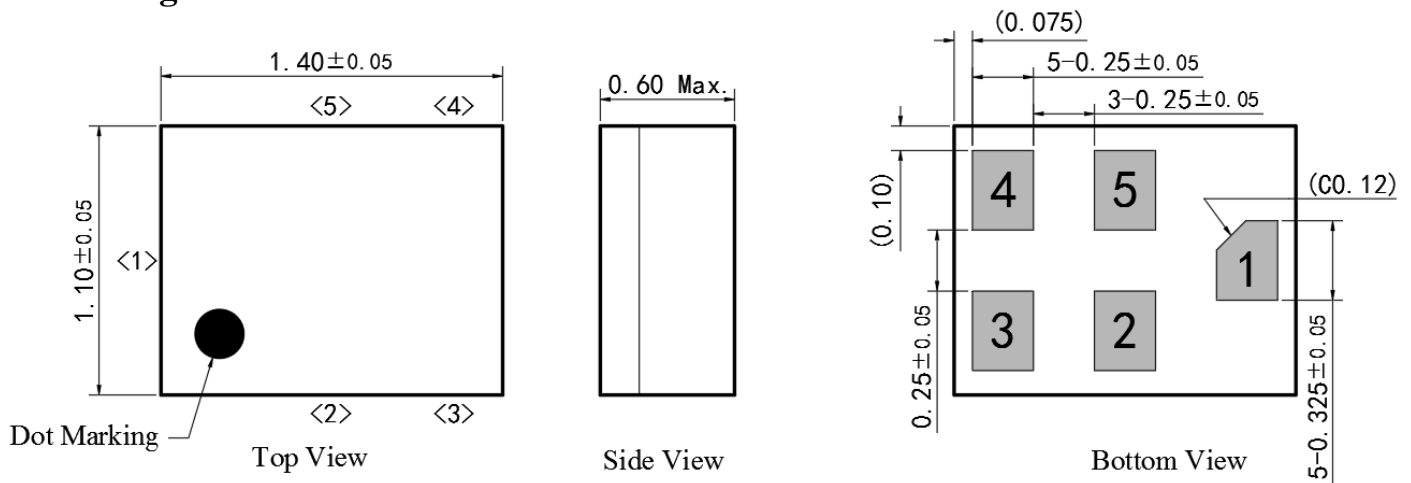


Figure 1: Drawing of Package with each tolerance range

4 Pin configuration

- 1 Input (recommended)
- 4 Output (recommended)
- 2,3,5 To be grounded

5 Matching Circuit(recommended)

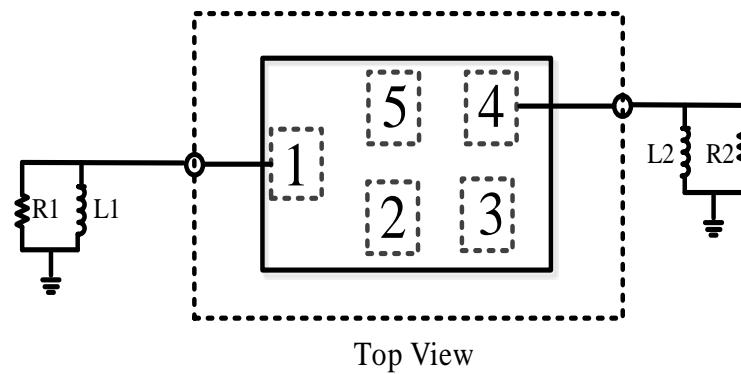


Figure 2: Schematic of matching circuit.

R1: 50 Ohm	L1: NC
R2: 50 Ohm	L2: NC

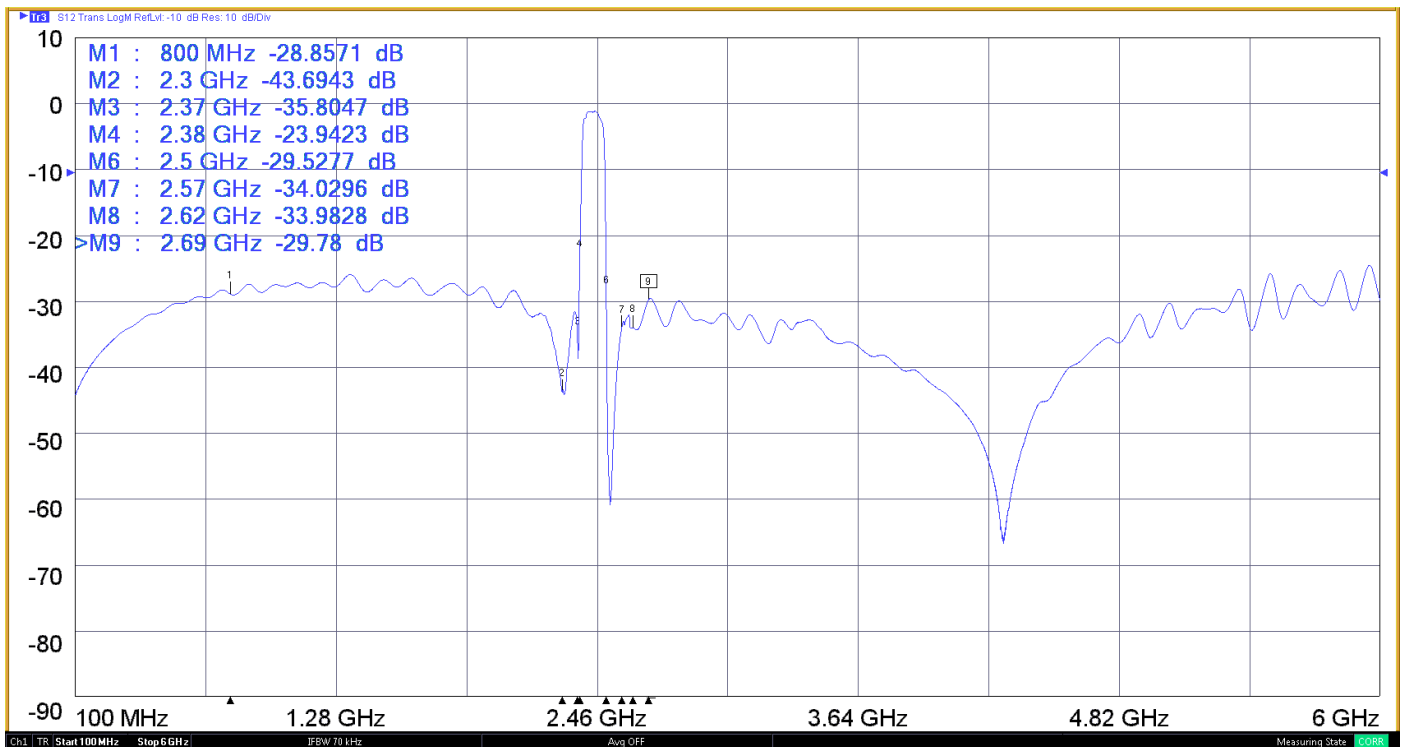
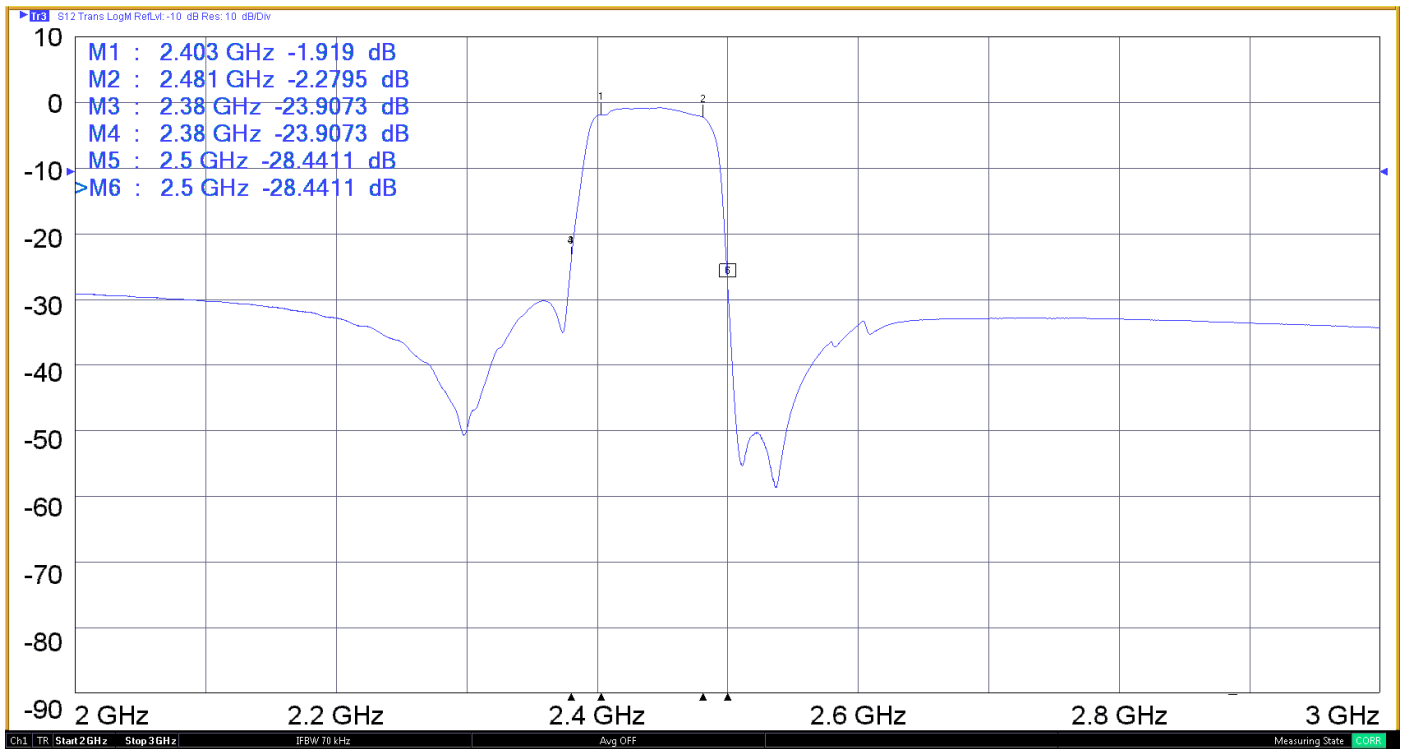
6 Absolute Maximum Ratings

Parameter	Rating	Unit
Operating Temperature	-30 to +85	°C
Storage Temperature	-40 to +85	°C
Maximum Input Power	+24	dBm
Maximum DC Voltage	5	V
Input terminating impedance	50	Ω
Output terminating impedance	50	Ω
Input Power@input port	Pin=24dBm Continuous wave for 2000h@+55°C	

7 Electrical Specifications

Parameter	Conditions	Min	Typ.	Max	Unit	Note
Insertion Loss	2403 - 2471 MHz	-	1.9	2.5	dB	
	2458 - 2476 MHz	-	1.8	2.4	dB	
	2463 - 2481 MHz	-	2.2	2.8	dB	
Passband Ripple	2403 - 2481 MHz	-	1.2	1.6	dB	
Attenuation	800 - 2300 MHz	25	29	-	dB	
	2300 - 2370 MHz	29	35	-	dB	
	2370 - 2380 MHz	23	25	-	dB	
	2500 - 2502 MHz	26	30	-	dB	
	2502 - 2570 MHz	30	34	-	dB	
	2570 - 2620 MHz	30	33	-	dB	
	2620 - 2690 MHz	28	30	-	dB	
VSWR Input	2403 - 2481 MHz	-	1.7	2.0	-	
VSWR Output	2403 - 2481 MHz	-	1.7	2.1	-	

8 Transmission coefficient



9 Reflection coefficients

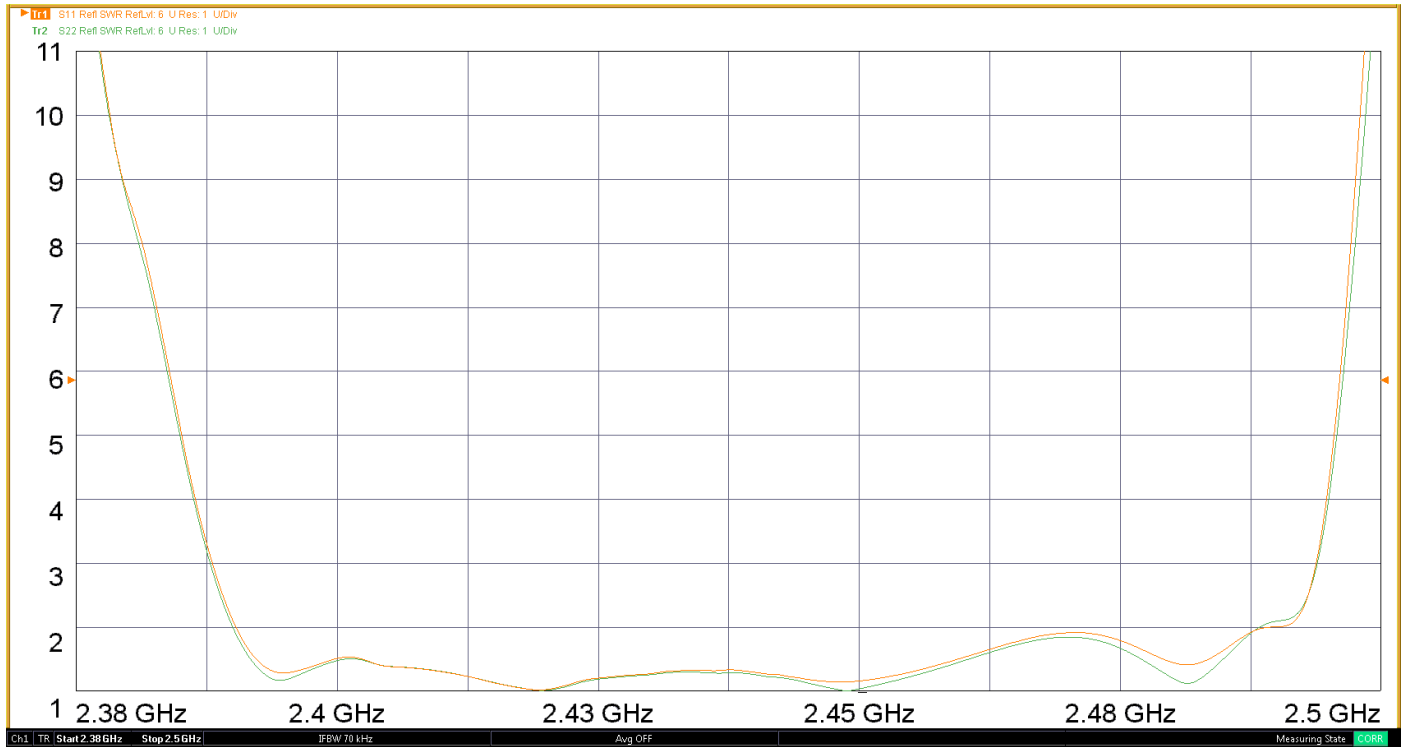


Figure 5: VSWR

10 Packing material

10.1 Tape

Tensile Strength of Carrier Tape: Carrier tape 10N or more; Cover tape 5N or more. Packaging quantities: 5000 PCS / Reel.

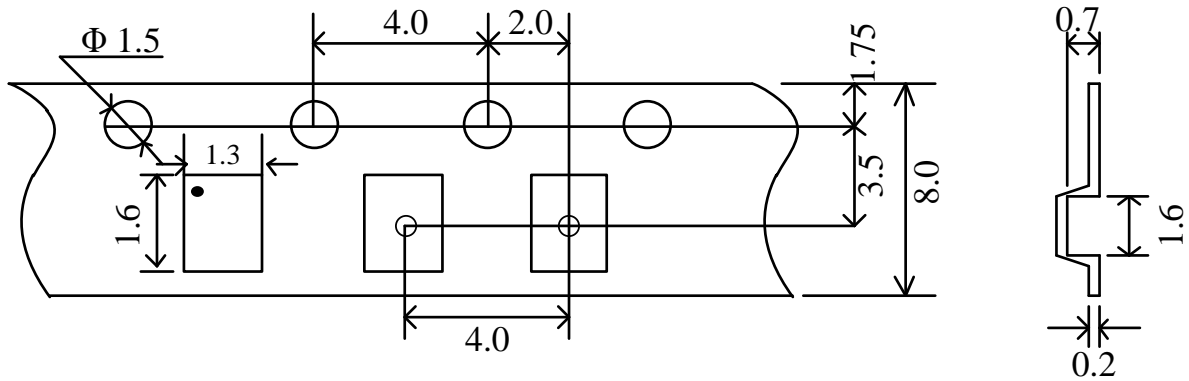


Figure 6: Drawing of tape with tape dimensions according above.

10.2 Reel with diameter of 178mm

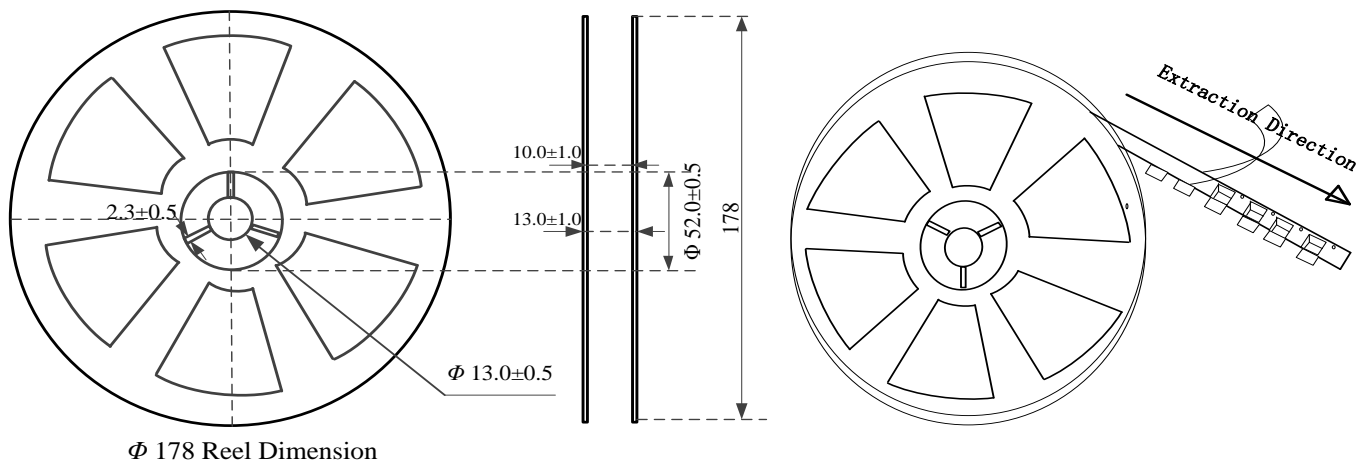


Figure 7: Drawing of reel with diameter of 178mm.

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [Signal Conditioning](#) category:

Click to view products by [Sunltech](#) manufacturer:

Other Similar products are found below :

[MAPDCC0001](#) [MAPDCC0004](#) [PD0409J5050S2HF](#) [HHS-109-PIN](#) [AFS14A35-1591.50-T3](#) [DS-323-PIN](#) [1A0220-3](#) [JP510S](#)
[LFB212G45SG8C341](#) [LFB322G45SN1A504](#) [LFL182G45TC3B746](#) [SF2159E](#) [30057](#) [AFS1575.42S4-T](#) [FM-104-PIN](#) [CER0813B](#)
[MAPDCC0005](#) [3A325](#) [40287](#) [ATB3225-75032NCT](#) [BD0810N50100AHF](#) [JHS-115-PIN](#) [DC0710J5005AHF](#) [DC2327J5005AHF](#) [43020](#)
[LFB2H2G60BB1C106](#) [LFL15869MTC1B787](#) [X3C19F1-20S](#) [XC3500P-20S](#) [10013-20](#) [SF2194E](#) [CDBLB455KCAX39-B0](#) [RF1353C](#)
[051157-0000](#) [PD0922J5050D2HF](#) [1E1305-3](#) [1F1304-3S](#) [1G1304-30](#) [B0922J7575AHF](#) [10017-3](#) [TP-103-PIN](#) [BD1222J50200AHF](#)
[BD1722J50100AHF](#) [2450DP39K5400E](#) [BD0810J50150AHF](#) [BD1722J50200AHF](#) [DSS-113-PIN](#) [DS-327-PIN](#) [MACP-008125-CK07F0](#) [DS-329-PIN](#)