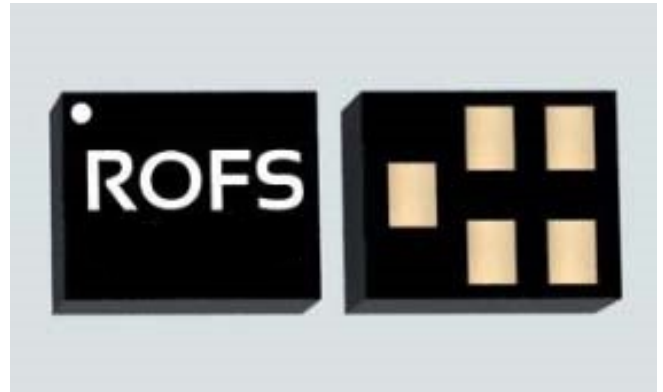


### Description

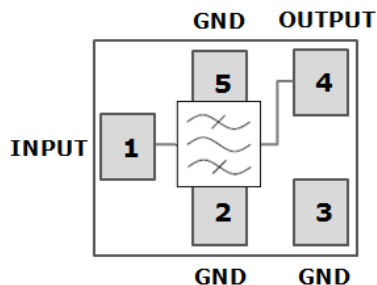
YTLP2312E is a high-performance, miniature filter designed for mobile equipment with LTE B40 band. It is designed with Film Bulk Acoustic Resonator (FBAR) technology, which can provide low insertion loss and steep skirt. So that this product enables coexistence of Wi-Fi signals within the same device or in close proximity to one another.

For general performance, the YTLP2312E typical insertion loss in the pass band is less than 2.4dB. Typical rejection at the Wi-Fi and LTE41 band are more than 35dB.

For the chip package, the YTLP2312E uses advanced module packing techniques to achieve the industry standard 1.1x0.9x0.6mm footprint, include bumping and flip chip.



### Functional Block Diagram



### Pin Connection

No.	Function
1	Input
4	Output
2,3,5	Ground

### Features

- For Wi-Fi - LTE coexistence application
- Plastic Chip Scale Package(CSP)
- Miniature Size: 1.1mm x 0.9 mm x 0.6 mm
- High Rejection at Wi-Fi and LTE B41 bands.
- Low Temperature Coefficient of Frequency
- Storage temperature range: -40 to +85 °C
- Excellent ESD protection ability: Class 1C
- Moisture Sensitivity : MSL3

### Environmental

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



### Electrical Specifications



Parameter(Operable Temperature:-20 to +85°C)	Min	Typ	Max	Unit
Insertion Loss(2300 ~ 2310 MHz)	\	-1.8	-2.9	dB
Insertion Loss(2310 ~ 2395 MHz)	\	-1.5	-2.6	dB
Insertion Loss(2395 ~ 2400 MHz)	\	-2.1	-3.2	dB
Ripple(2300 ~ 2310 MHz)	\	0.5	1.0	dB
Ripple(2310 ~ 2395 MHz)	\	0.8	1.6	dB
Ripple(2395 ~ 2400 MHz)	\	0.4	1.8	dB
Return Loss(2300 ~ 2400 MHz)	-12	-15.0	\	dB
<b>Absolute Attenuation</b>			\	
750 ~ 1577 MHz	-25.0	-38.0	\	dB
1577 ~ 1680 MHz	-25.0	-30.0	\	dB
1845 ~ 1880 MHz	-24.0	-28.0	\	dB
2110 ~ 2170 MHz	-25.0	-28.0	\	dB
2420 ~ 2427 MHz	-15.0	-53.0	\	dB
2427 ~ 2460 MHz	-45.0	-60.0	\	dB
2460 ~ 2500 MHz	-35.0	-45.0	\	dB
4600 ~ 4800 MHz	-35.0	-45.0	\	dB
6900 ~ 7200 MHz	-15.0	-34.0	\	dB

(1) **Typ Data** is the integrated value of the linear S-parameter over indicated band at +25°C environment

(2) **Max/min Data** is the performance over -20 to +85°C.



Typical Performance at Tc=25 °C

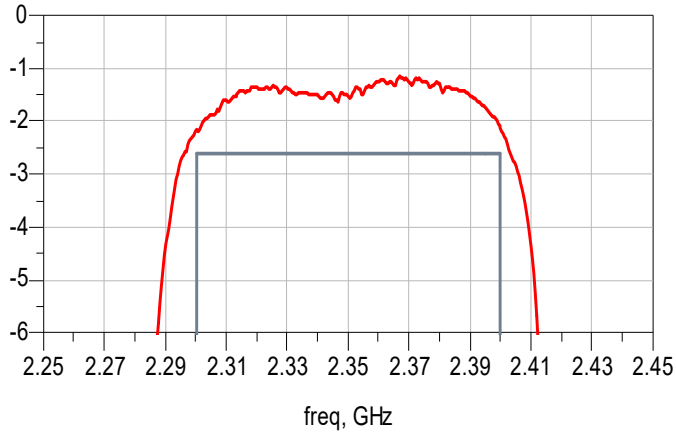


Figure.1 Passband Insertion Loss

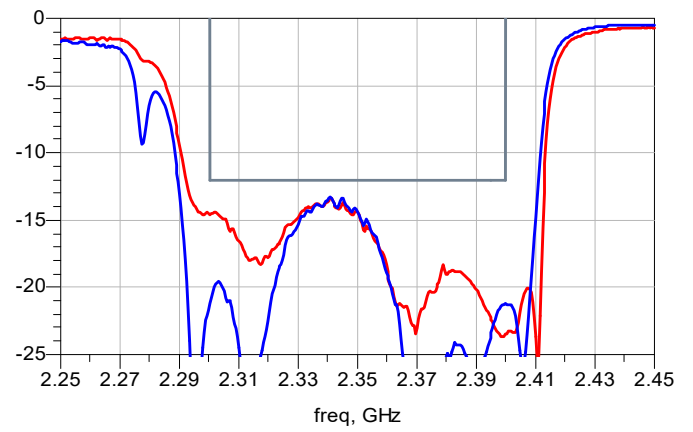


Figure.2 Passband Return Loss

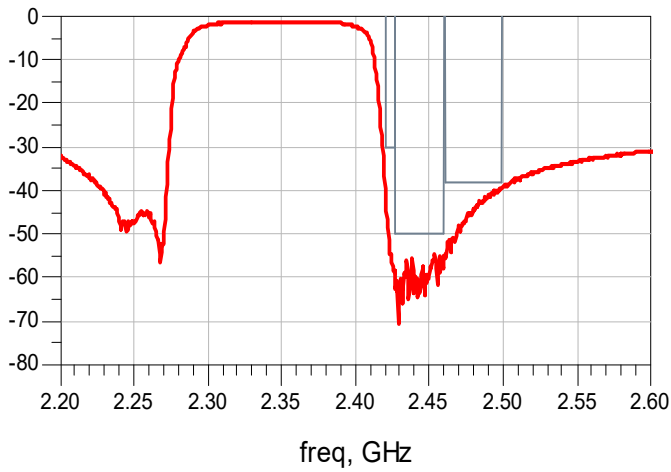


Figure.3 Nearband Insertion Loss

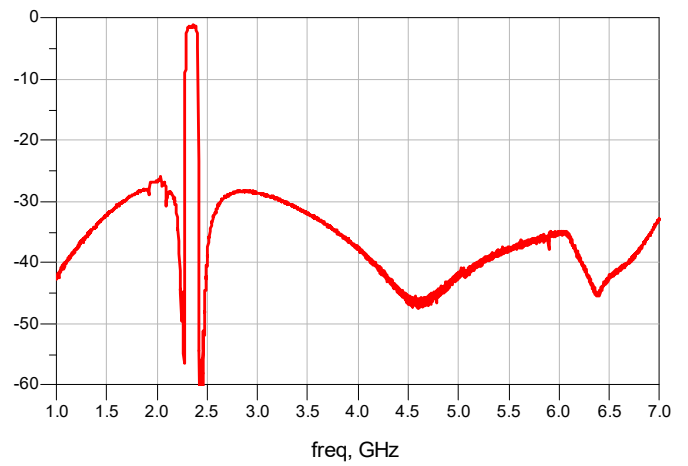
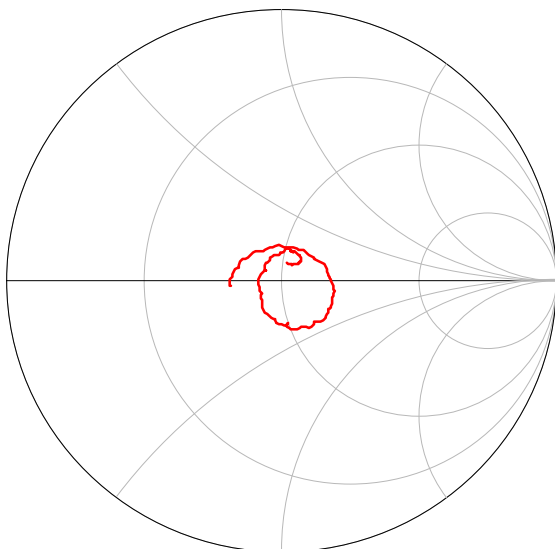
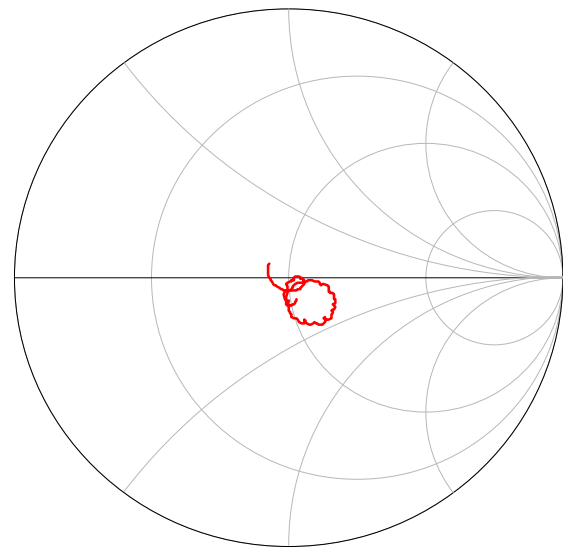


Figure.4 Wideband Insertion Loss



freq (2.300GHz to 2.400GHz)

Figure.5 Input Smith Chart S11

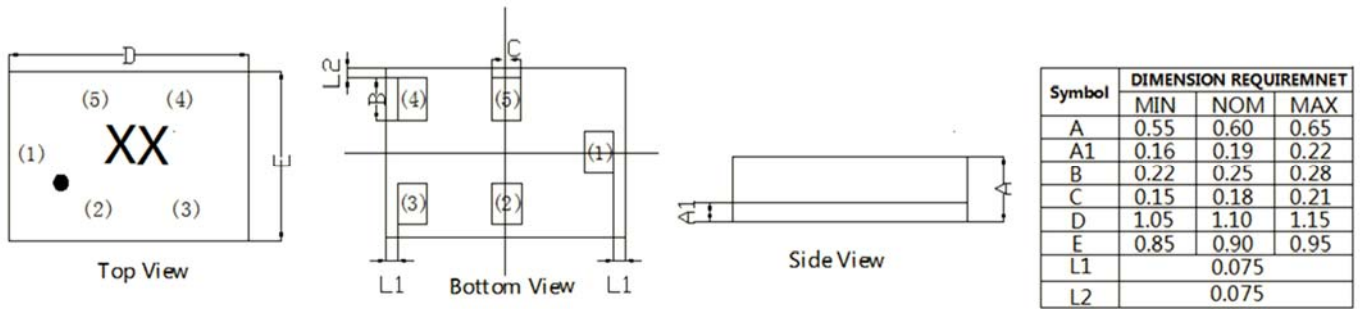


freq (2.300GHz to 2.400GHz)

Figure.6 Output Smith Chart S22



## Package Outline Drawing



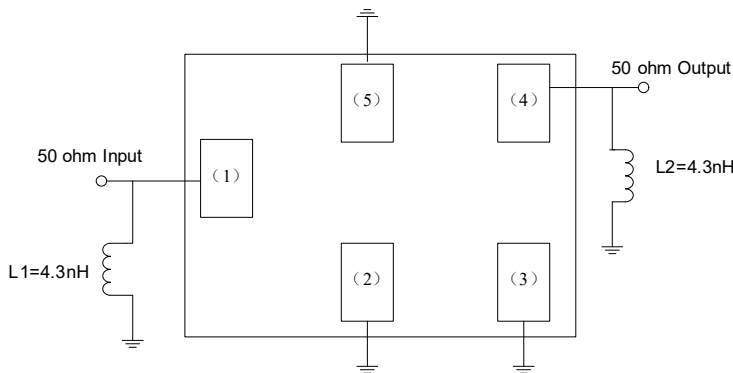
### Notes:

1. Dimension: mm
2. Dimensions nominal unless otherwise noted
3. Contact area are gold plated
4. Pad(1) to (5) are same size
5. XX is ROFS inside code

### Pin Connection:

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

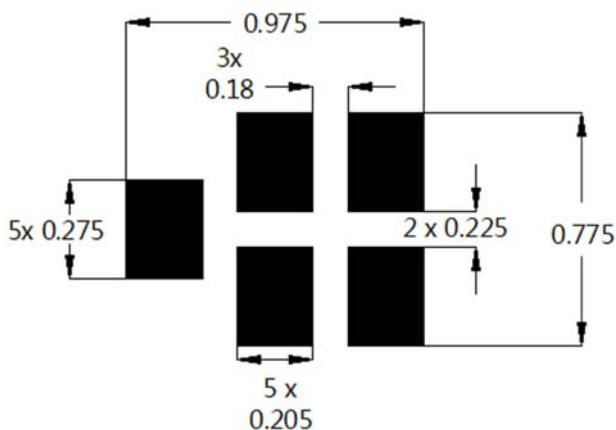
### Test Circuit



### Notes:

1. Matching component values shown are ROFS evaluation board results, please adjust component values by the actual use environment.

### PCB Footprint



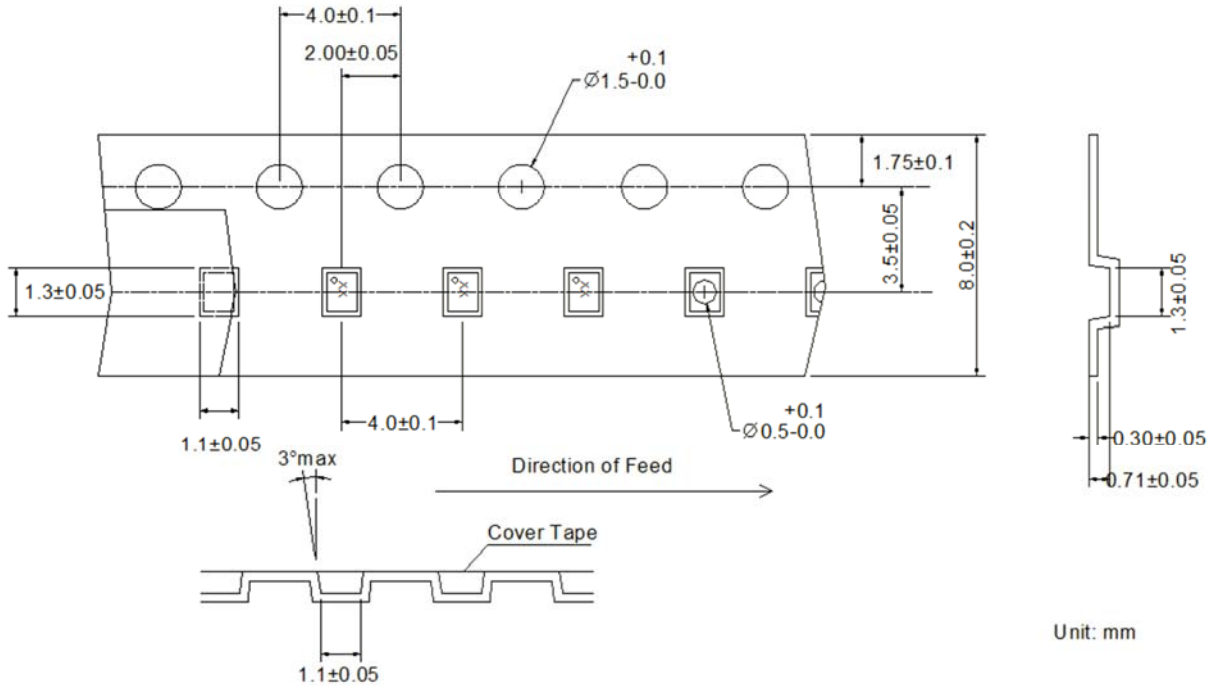
### Notes:

1. Black indicates metalized area.
2. This footprint represents a recommendation only, some modification may be necessary to suit end user assembly materials and processes.
3. For solder pad recommendation see mechanical information.
4. Dimensions shown are nominal in millimeters.

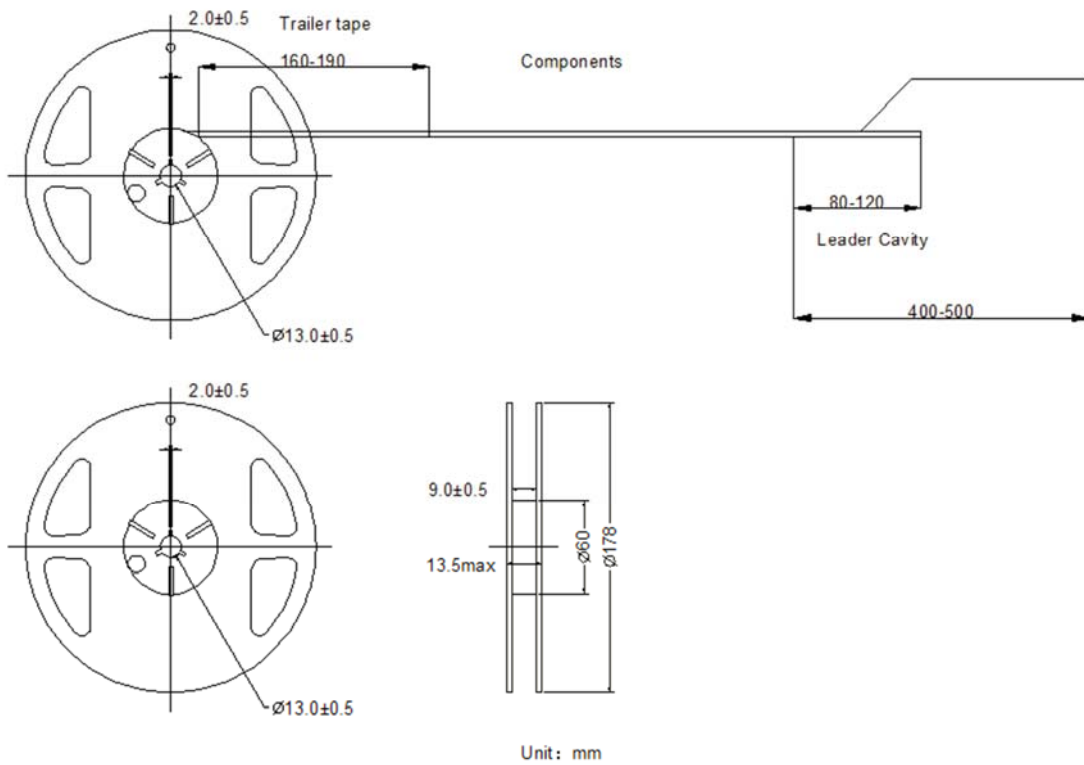


## Packing

### 1. Tape Dimension



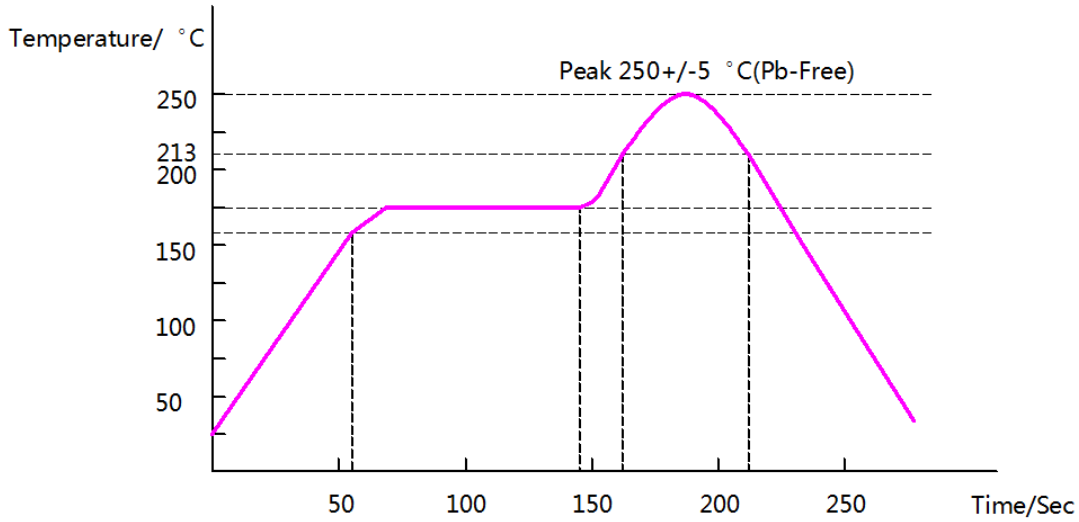
### 2. Reel Dimension



5000Pcs/Reel



## Recommended IR Reflow Profile



## Order Information

Part Number	Qty Per Reel	Container
YTLP2312E	5000	7 inch Reel

