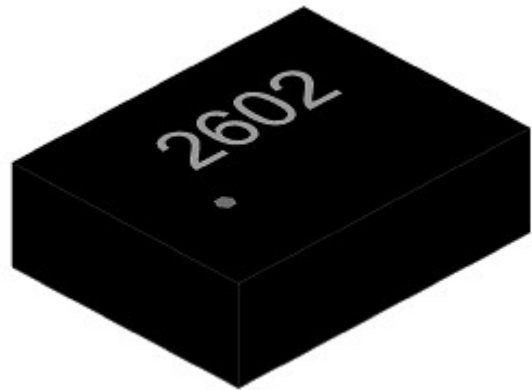


Description

YTLD2602D is a LTE Band 41 (2496-2690MHz) Tx/Rx bandpass filter with a package size of only 1.4x1.1mm.

YTLD2602D is designed with Film Bulk Acoustic Resonator (FBAR) technology, which provides high-Q filters and meet requirements of low insertion loss, high out-of-band attenuation, high power handling and stringent linearity.

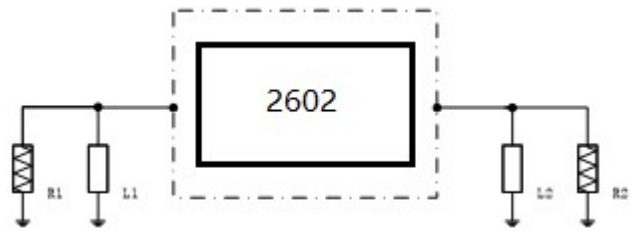
YTLD2602D uses chip scale packaging (CSP) technology to assembly the filters into a molded chip-on-board module.



Functional Block Diagram (Top View)

Features

- Miniature Size
1.4mm x 1.1 mm x 0.65 mm
- Low insertion loss
Tx/Rx bandpass, 2496-2690MHz: 1.6dB Typ.
- High Rejection in 2.4G Wi-Fi and 5G New Band
2.4G Wi-Fi: 40dB Typ.
- Tx Input Power
+29 dBm CW for 5000h @ +50°C
- ESD protection ability: Class1A
- Moisture Sensitivity: MSL3
- Operation Temperature: -20 to +85°C Storage
- Temperature: -40 to +85°C



Reference Des.	Value	Description	Manuf.
R1	50ohm		
R2	50ohm		
L1	3.1nH	Inductor	
L2	3.1nH	Inductor	

Environmental

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



Electrical Specification

Transmit Port to Antenna Port

Parameter(Operable Temperature: TBD)	Min	Typ*	Max	Unit
Insertion Loss				
(2496~2500MHz)	\	2.7	3.1	dB
(2500~2690MHz)	\	1.5	2.5	dB
Ripple				
(2496~2500MHz)	\	1.2	2	dB
(2500~2690MHz)	\	0.5	1.5	dB
VSWR				
Tx/Rx Port (2496~2690MHz)	\	1.2	1.6	dB
Ant Port (2496~2690MHz)	\	1.2	1.5	dB
Absolute Attenuation				
(10~699MHz)	40	50	\	dB
(699~916MHz)	40	50	\	dB
(916~1565MHz)	30	40	\	dB
(1565~1615MHz)	30	35	\	dB
(1615~1710MHz)	30	35	\	dB
(1710~1785MHz)	35	40	\	dB
(1805~1880MHz)	30	40	\	dB
(1880~1920MHz)	30	40	\	dB
(1920~1980MHz)	25	33	\	dB
(2110~2170MHz)	15	20	\	dB
(2300~2400MHz)	10	20	\	dB
(2401~2468MHz)	35	43	\	dB
(2451~2473MHz)	40	45	\	dB
(2456~2478MHz)	30	43	\	dB
(2461~2483MHz)	10	38	\	dB
(2760~2850MHz)	30	50	\	dB
(2850~3300MHz)	10	18	\	dB
(3300~4200MHz)	20	28	\	dB
(4400~4992MHz)	30	45	\	dB
(4992~5380MHz)	35	50	\	dB
(5380~7487MHz)	20	35	\	dB
(7487~8070MHz)	25	30	\	dB



Typical Performance at Tc=25°C

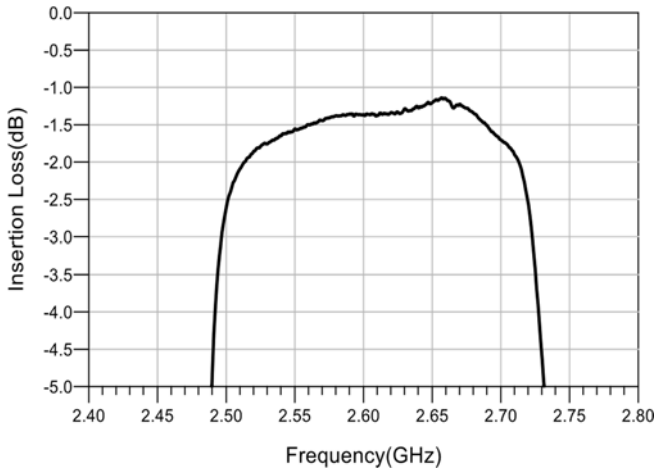


Figure1. Pass Band

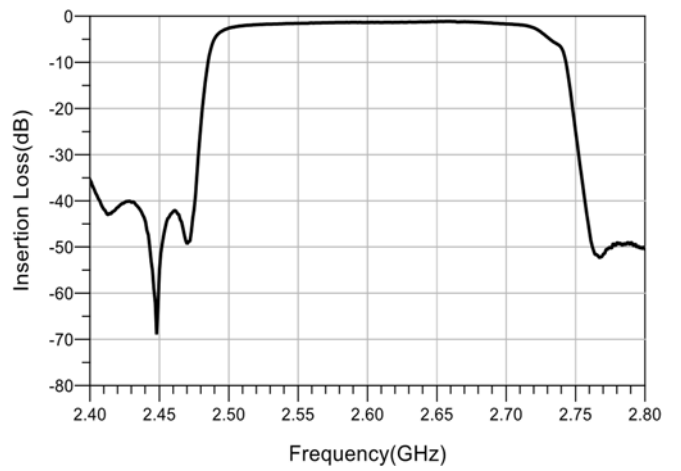


Figure2. Narrow Band

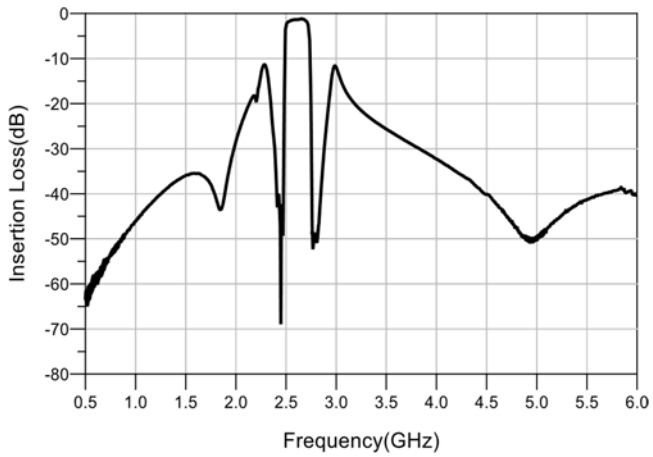


Figure3. Wide Band

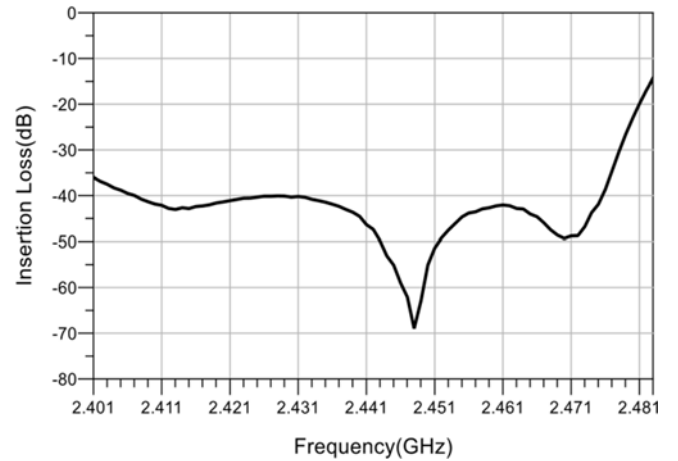


Figure4. Rejection in Wi-Fi Band

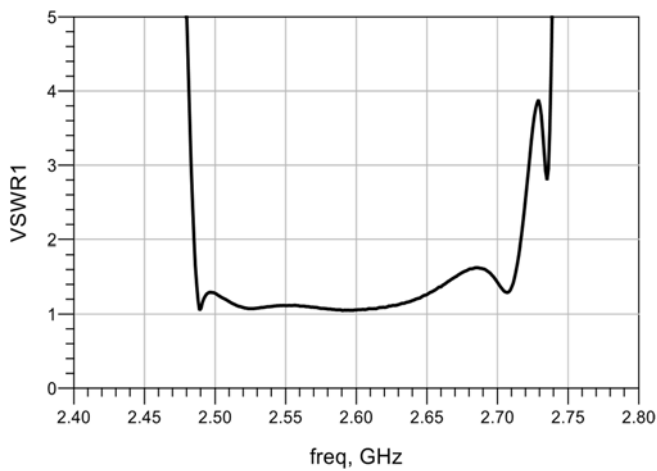


Figure5. VSWR1

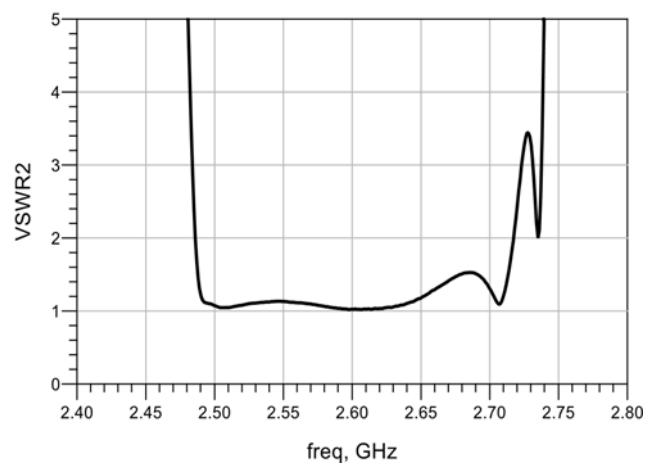
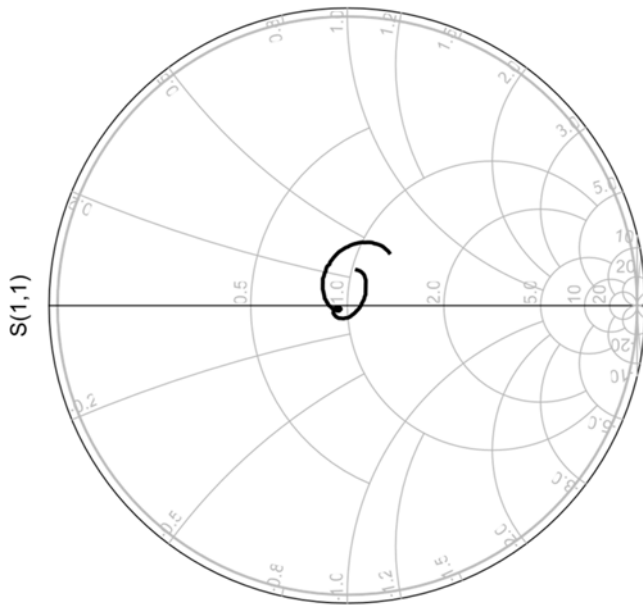


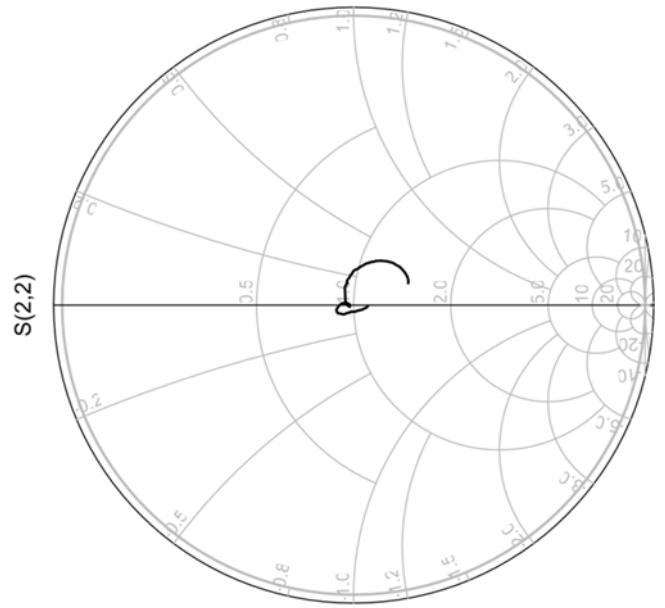
Figure6. VSWR2





freq (2.496GHz to 2.690GHz)

Figure7. S11

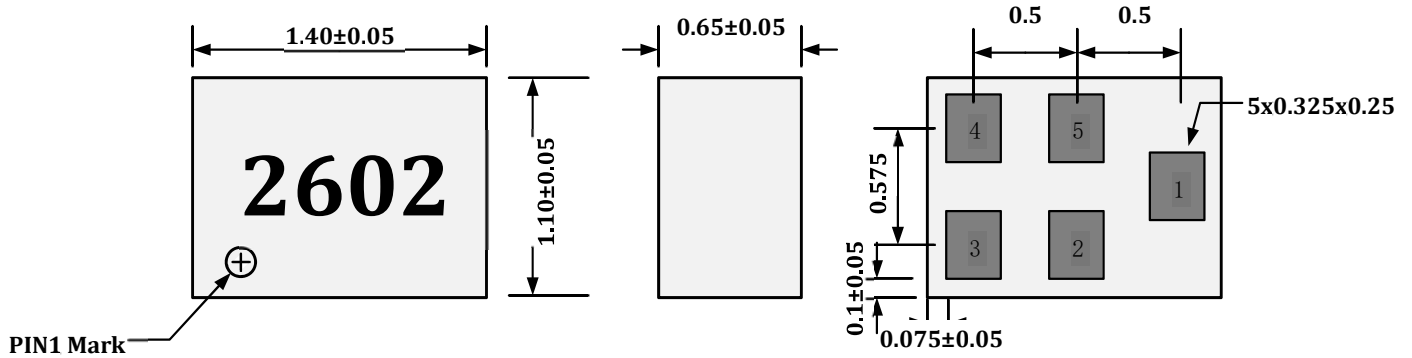


freq (2.496GHz to 2.690GHz)

Figure8. S22



Package Outline



Top view

Side view

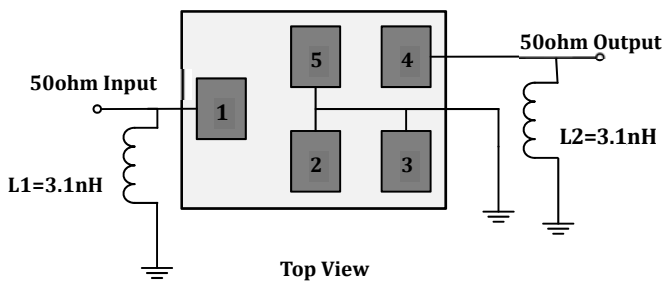
Bottom view

Note:

1. Dimension: mm
2. Dimensions nominal unless otherwise noted
3. Contact area are gold plated
4. 2602 is product code
5. Pad(1) to (5) are same size

No.	Function
1	Tx/Rx
4	Ant
2, 3, 5	GND

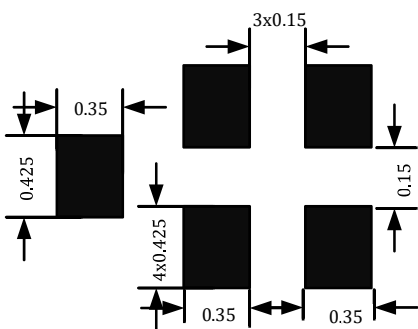
Test Circuit



Notes:

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

PCB Footprint



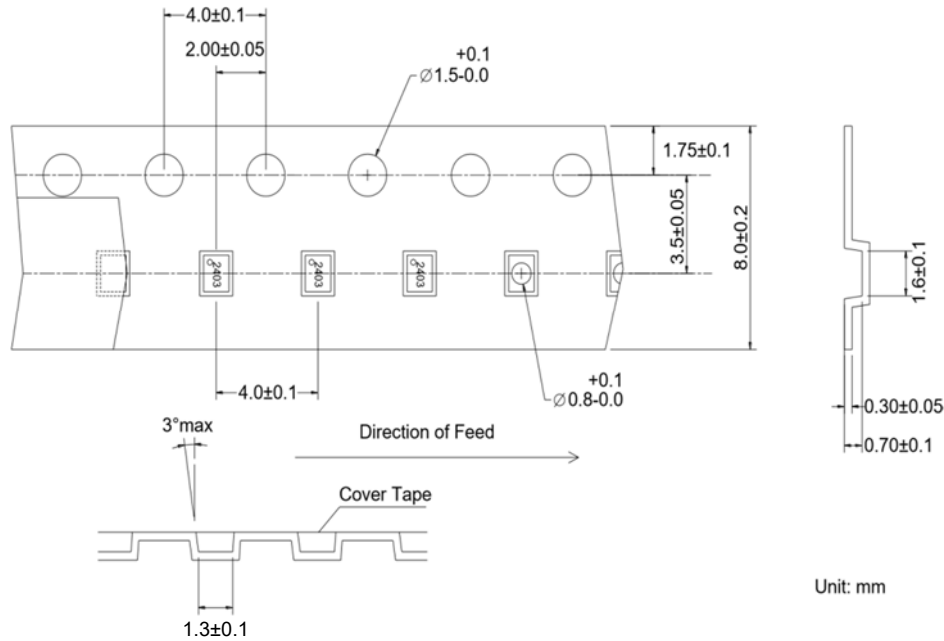
Notes:

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.

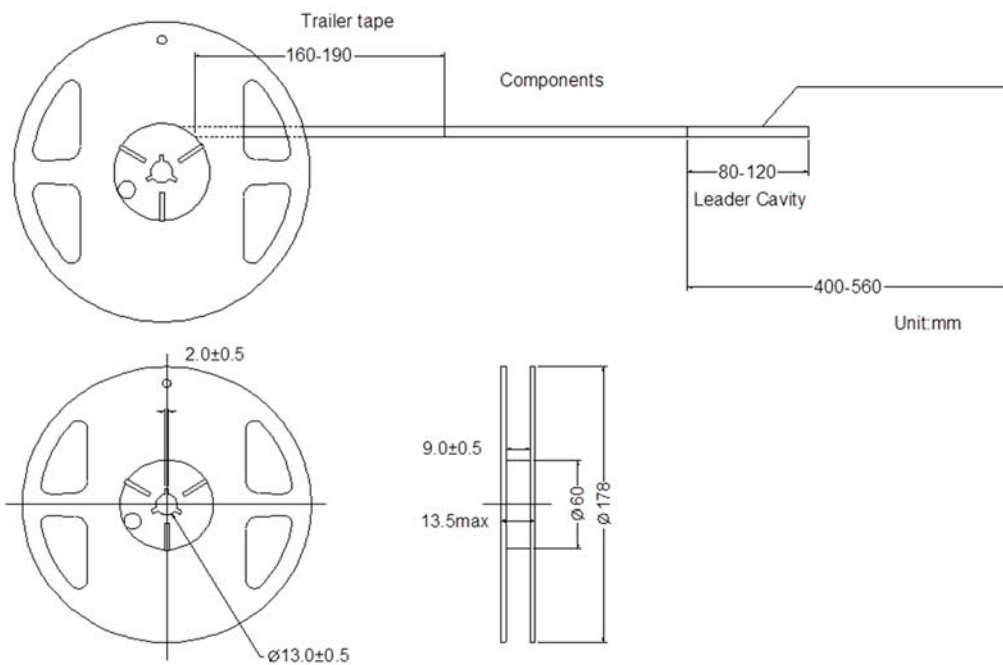


Packing

1. Tape Dimension



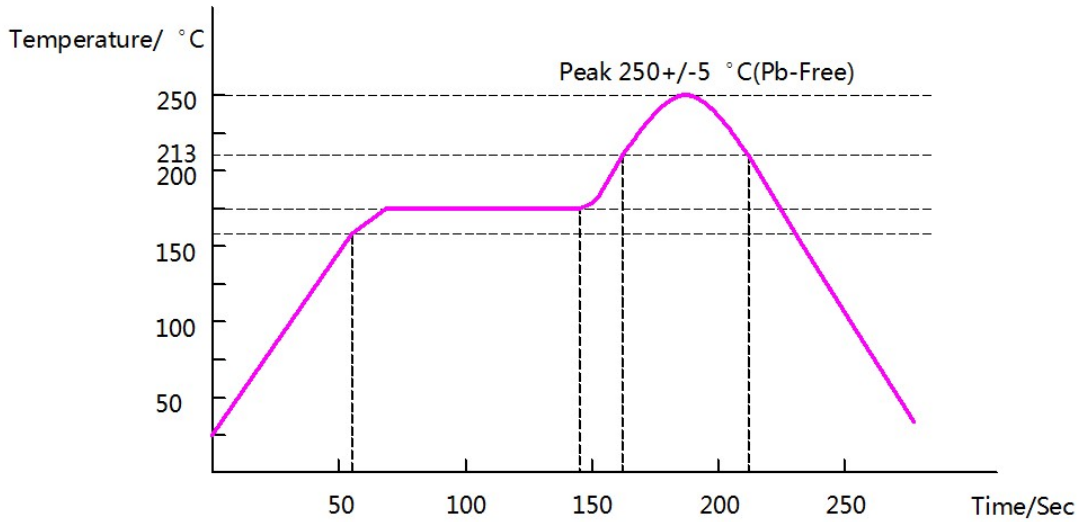
2. Reel Dimension



4000Pcs/Reel



Recommended IR Reflow Profile



Order Information

Part Number	Qty Per Reel	Container
YTLP2602D	4000	7 inch Reel



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[DC0710J5005AHF](#) [DC2327J5005AHF](#) [43020](#) [LFB2H2G60BB1C106](#) [LFL15869MTC1B787](#) [X3C19F1-20S](#) [XC3500P-20S](#) [10013-20](#)
[SF2194E](#) [CDBLB455KCAX39-B0](#) [TGL2208-SM, EVAL](#) [RF1353C](#) [051157-0000](#) [PD0922J5050D2HF](#) [1E1305-3](#) [1F1304-3S](#) [1G1304-30](#)
[B0922J7575AHF](#) [10017-3](#) [TP-103-PIN](#) [BD1222J50200AHF](#) [BD1722J50100AHF](#) [2450DP39K5400E](#) [BD0810J50150AHF](#)