

Description

YTLP2595B is a LTE Band 41 (2515-2675MHz) Tx/Rx bandpass filter designer for use in High Power User Equipment applications with a package size of only 2.0x1.6mm.

YTLP2595B 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.

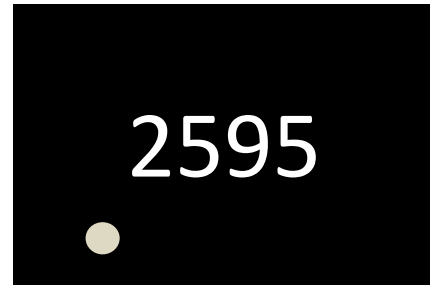
YTLP2595B uses chip scale packaging (CSP) technology to assembly the filters into a molded chip-on-board module.

Features

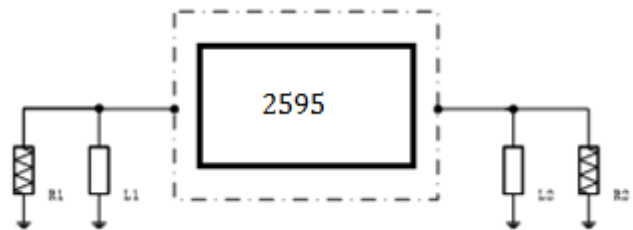
- Miniature Size
2.0mm x 1.6 mm x 0.69 mm
- Low insertion loss
Tx/Rx bandpass, 2515-2675MHz: 1.3dB Typ.
- High Rejection in 2.4G Wi-Fi and 5G New Band
2.4G Wi-Fi: 50dB Typ.
- Tx Input Power
+32 dBm CW for 5000h @ +50°C
- ESD protection ability: Class1C
- Moisture Sensitivity: MSL3
- Operation Temperature: -40 to +95°C
- Storage Temperature: -40 to +95°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		
L1	3.6nH	Inductor	
L2	3.6nH	Inductor	

Pin Connection

No.	Function
1	Tx/Rx
2	Ant.
3	GND



Electrical Specification

Transmit Port to Antenna Port				
Parameter(Operable Temperature: TBD)	Min	Typ*	Max	Unit
Insertion Loss				
(2515~2675MHz)	\	1.3	3.5	dB
Ripple				
(2515~2675MHz)	\	\	1.5	dB
VSWR				
Tx/Rx Port (2515~2675MHz)	\	1.4	1.6	dB
Ant Port (2515~2675MHz)	\	1.4	1.6	dB
Absolute Attenuation				
(10~2170MHz)	30	47	\	dB
(2320~2370MHz)	30	52	\	dB
(2400~2440MHz)	50	57	\	dB
(2440~2483.5MHz)	48	50	\	dB
(2483.5~2500MHz)	5	25		
(2700-2745MHz)	5	25	\	dB
(2745-2900MHz)	30	65	\	dB
(3300-3600MHz)	30	58	\	
(4700-5000MHz)	30	48	\	
(5030-5350MHz)	40	48		
(5725-5850MHz)	20	50		

Typical Performance at Tc=25℃



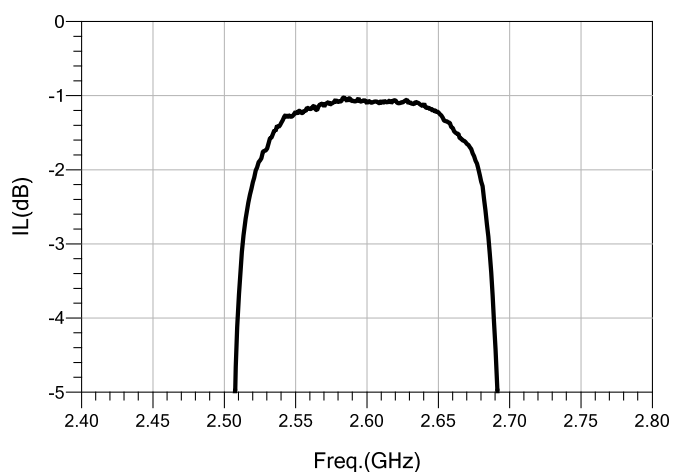


Figure1. Pass Band

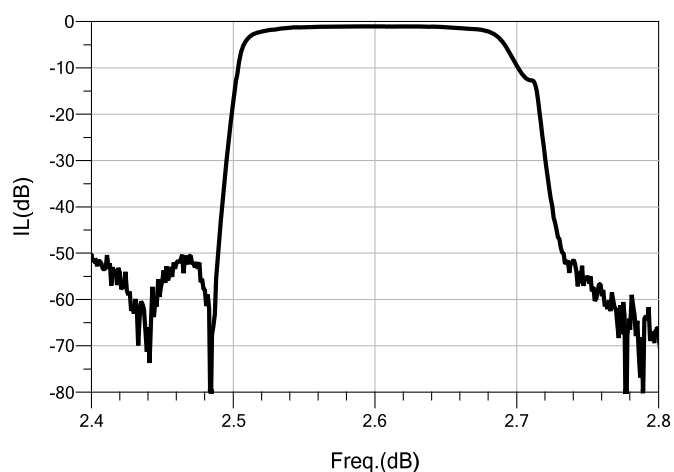


Figure2. Narrow Band

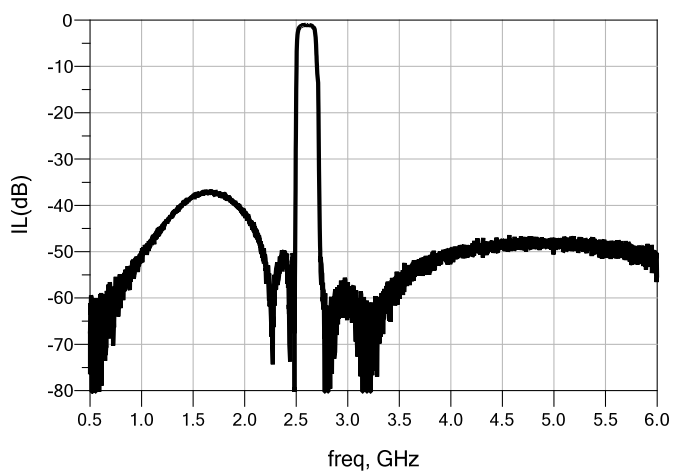


Figure3. Wide Band

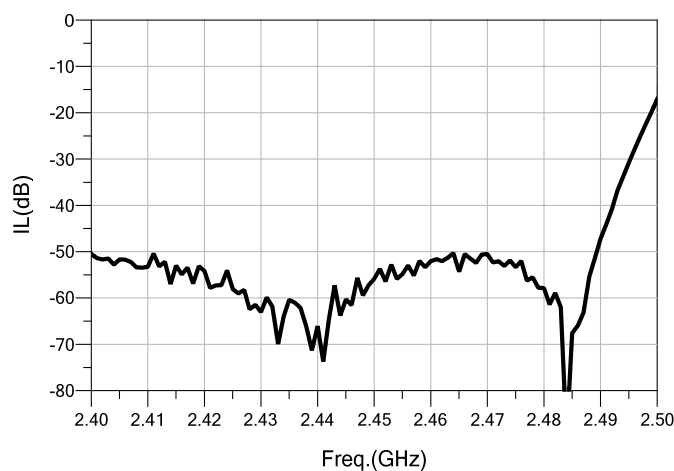


Figure4. Rejection in Wi-Fi Band

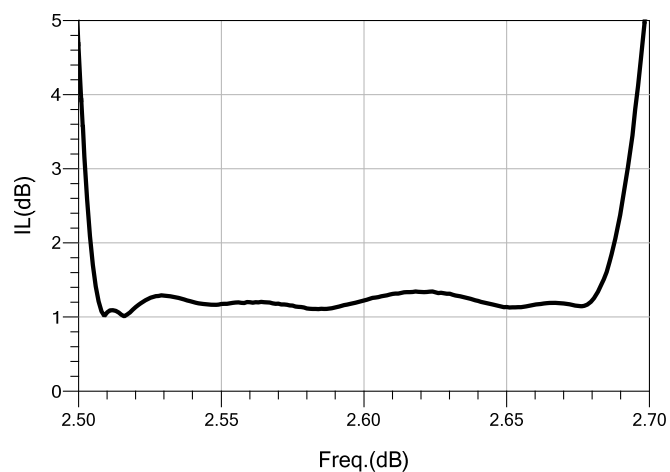


Figure5. VSWR1

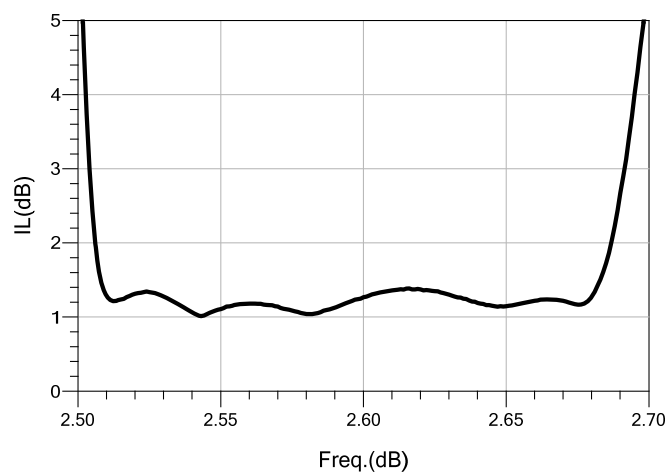


Figure6. VSWR2



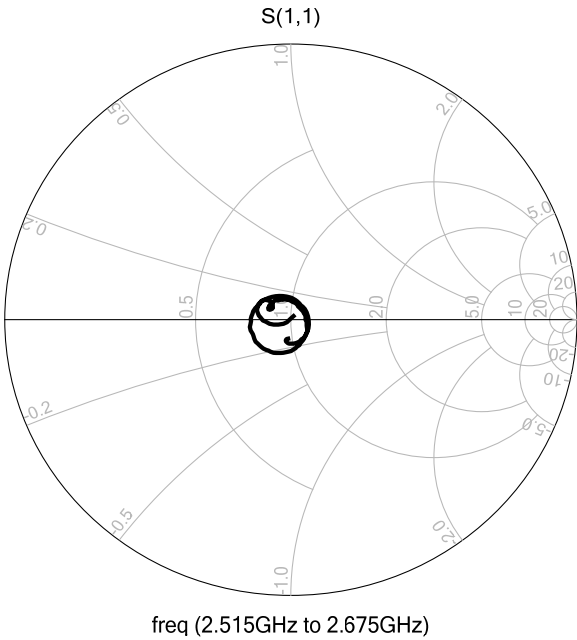


Figure7. S11

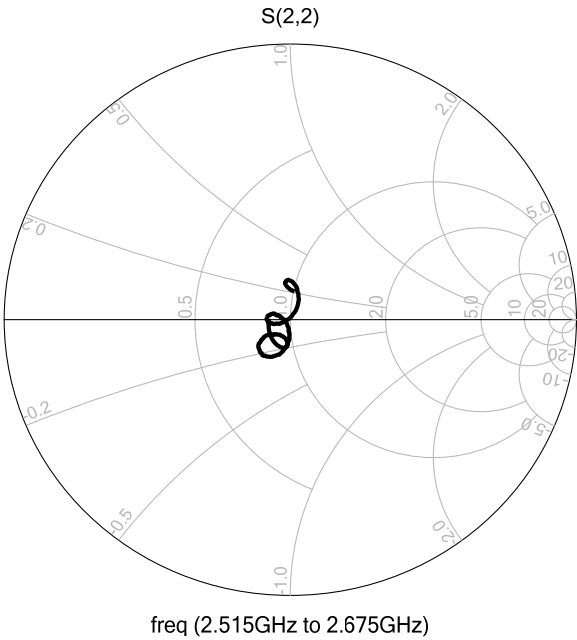
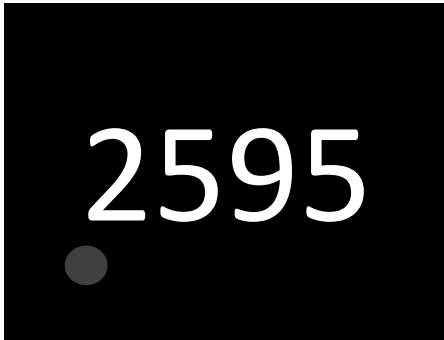
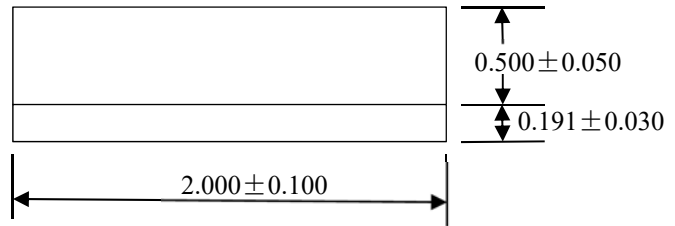


Figure8. S22

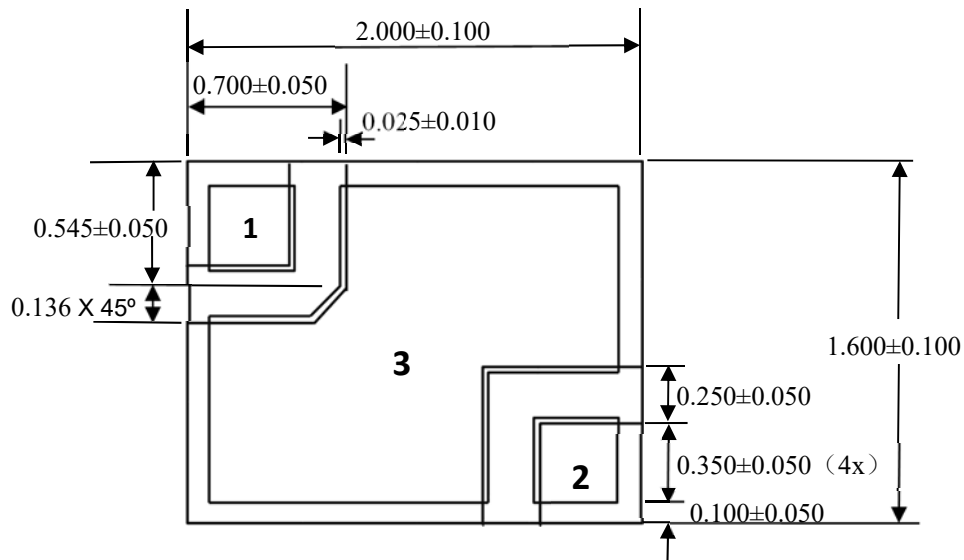




Top view



Side view



Bottom view

Note:

1. Dimension: mm
2. Dimensions nominal unless otherwise noted
3. Contact area are gold plated
4. 2595is product code

No.	Function
1	Tx/Rx
2	Ant.
3	GND

