

Application

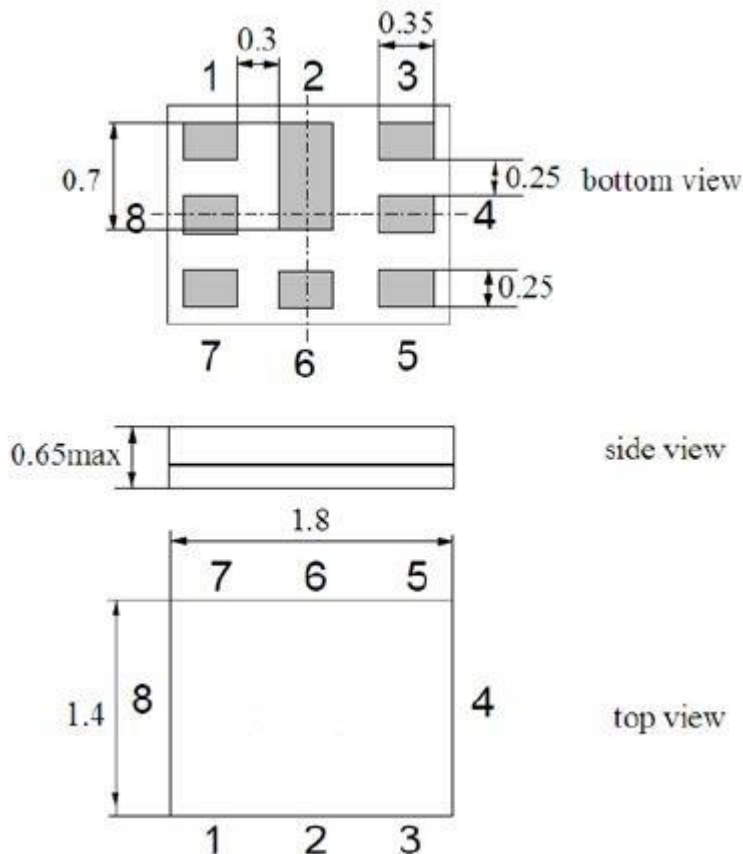
- ❖ Low-loss Saw Duplexer for mobile telephone LTE and WCDMA Band3 systems.
- ❖ Low insertion attenuation and low passband ripple.
- ❖ Usable passband 75 MHz
- ❖ High isolation between Tx and Rx.

Electrical Specifications

Parameters			Specification	Unit	
Tx to ANT	Center Frequency		1747.500	MHz	
	Insertion Loss, typ/max		1710 ~ 1785 MHz	2.3 / 2.6	dB
			1712.5 ~ 1782.5 MHz	2.2 / 2.4	dB
	Amplitude Ripple Any 5MHz, typ/max		1710 ~ 1785 MHz	0.6 / 1.5	dB
	VSWR, typ/max	TX	1710 ~ 1785 MHz	1.6 / 2.0	-
		ANT	1710 ~ 1785 MHz	1.6 / 2.0	-
	Input Power (+50°C, 5000h, CW)		1710 ~ 1785 MHz	30	dBm
	Attenuation, min/typ		10 ~ 960 MHz	30 / 35	dB
			1164 ~ 1189 MHz	28 / 35	dB
			1559 ~ 1606 MHz	28 / 35	dB
			1606 ~ 1680 MHz	15 / 20	dB
			1805 ~ 1880 MHz	45 / 54	dB
			1920 ~ 1980 MHz	30 / 38	dB
			2110 ~ 2170 MHz	27 / 35	dB
2400 ~ 2500 MHz			30 / 35	dB	
2620 ~ 2690 MHz			27 / 36	dB	
3420 ~ 3570 MHz			25 / 32	dB	
4900 ~ 5850 MHz	8 / 30	dB			
ANT to Rx	Center Frequency		1842.500	dB	
	Insertion Loss, typ/max		1805 ~ 1880 MHz	2.5 / 3.4	dB
			1807.5 ~ 1877.5 MHz	2.2 / 3.0	dB
	Pass Band Ripple Any 5MHz, typ/max		1805 ~ 1880 MHz	0.5 / 1.5	dB
	VSWR, typ/max	ANT	1805 ~ 1880 MHz	1.7 / 2.0	-
		Rx	1805 ~ 1880 MHz	1.6 / 2.0	-
	Attenuation, min/typ		10 ~ 1710 MHz	40 / 45	dB
			718 ~ 748 MHz	40 / 50	dB
			814 ~ 849 MHz	40 / 50	dB
			832 ~ 862 MHz	40 / 50	dB
			880 ~ 915 MHz	40 / 50	dB
1447 ~ 1463 MHz			40 / 45	dB	
1710 ~ 1785 MHz			45 / 56	dB	
1920 ~ 2400 MHz			38 / 45	dB	
2400 ~ 2500 MHz	40 / 48	dB			

		2500 ~ 2570 MHz	40 / 48	dB
		2570 ~ 3760 MHz	35 / 40	dB
		4900 ~ 5950 MHz	30 / 35	dB
Tx to Rx	Isolation, min/typ	1710 ~ 1785 MHz	53 / 58	dB
		1805 ~ 1880 MHz	53 / 55	dB
DC Voltage			5	V
ESD Voltage ESD (MM)			50	V
Sensitive Discharge Device ESD (HBM)			175	V
Operating Temperature Range			-30 ~ +85	°C
Storage Temperature Range			-40 ~ +85	°C
MSL			2	-

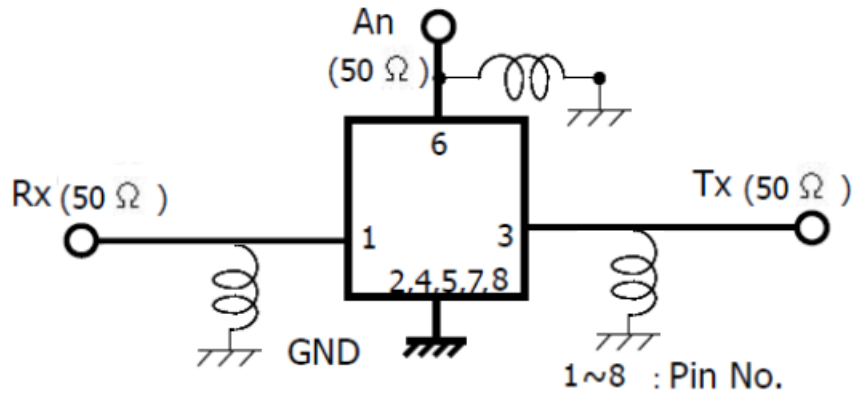
Dimension



PIN	SYMBOL	FUNCTION
1	Rx	Rx Output
2,4,5,7,8	GND	Ground
3	Tx	Tx Input
6	ANT	Antenna

Unit : mm

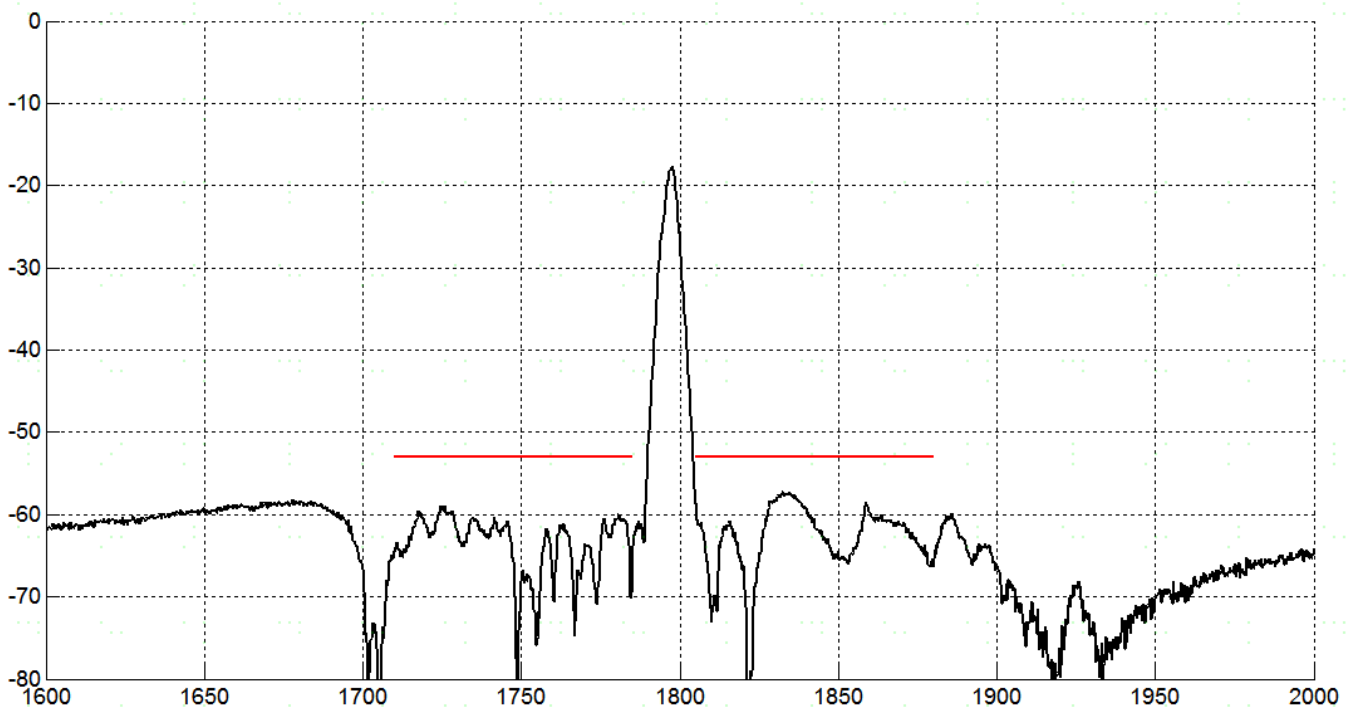
Test Circuit



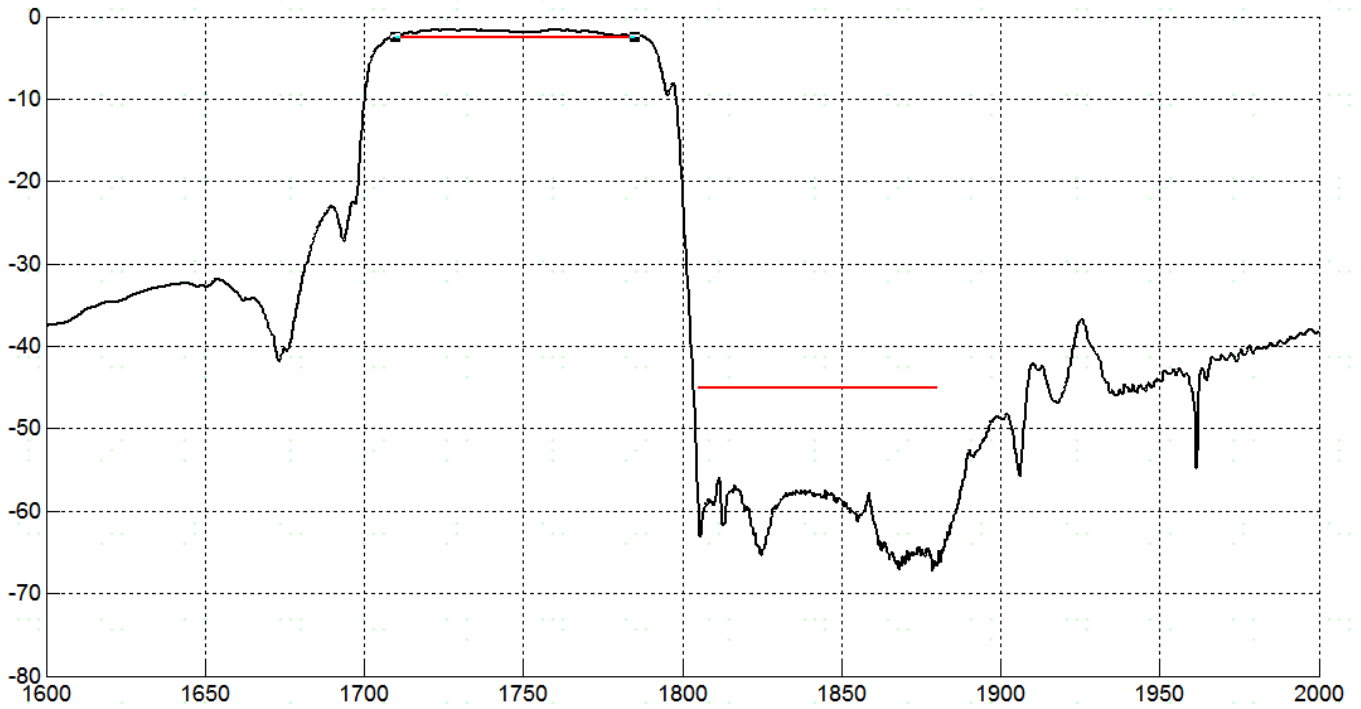
The inductance used for matching is Ideal inductor.

Frequency Characteristics

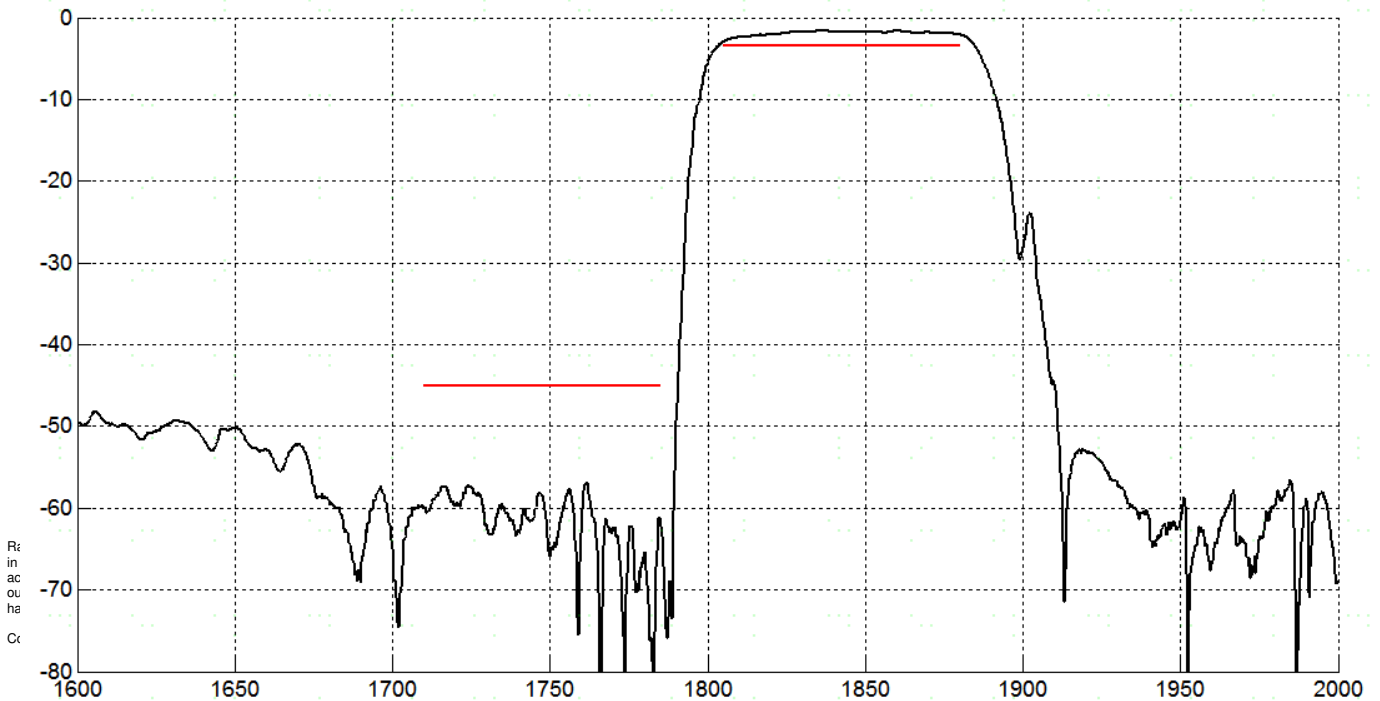
Isolation TX-RX



TX-ANT



ANT-RX



● APPROVAL

DRAWN BY	AR, August 10, 2021
APPROVED BY	CP, August 10, 2021
REVISION	A, Initial Release



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