

Application

- ❖ Low loss Saw Duplexer for mobile telephone LTE and WCDMA Band V systems.
- ❖ Low insertion attenuation and low passband ripple.
- ❖ Usable passband 25 MHz
- ❖ High isolation between Tx and Rx.

Electrical Specifications

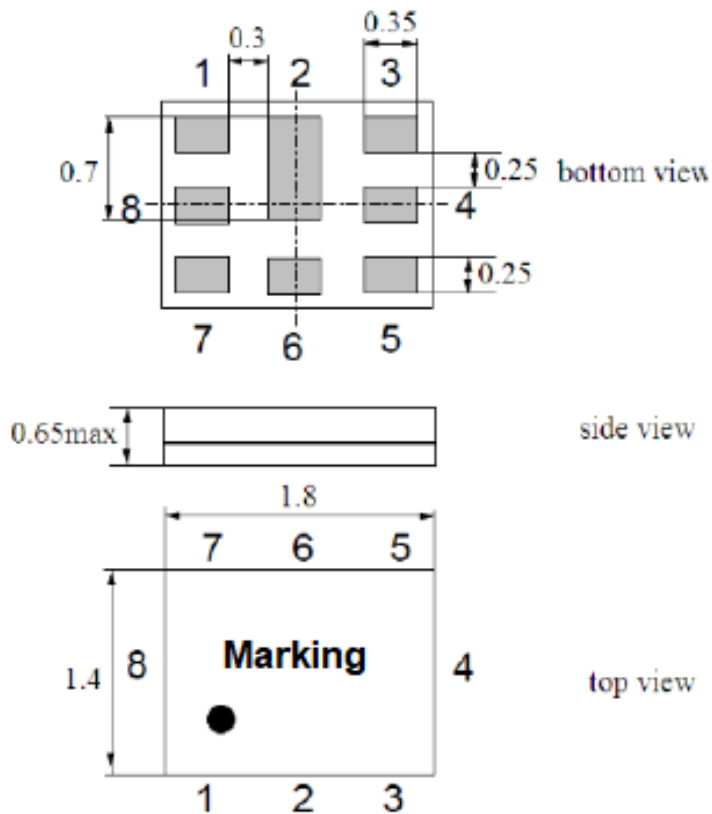
Parameters			Value	Unit		
Tx to ANT	Insertion Loss, typ/max		824 ~ 849 MHz	1.4 / 1.8	dB	
			826.5 ~ 846.5 MHz	1.3 / 1.7	dB	
	Amplitude Ripple		824 ~ 849 MHz	0.5 / 1.3	dB	
	VSWR, typ/max	ANT	824 ~ 849 MHz	1.6 / 2.0	-	
		Tx		1.6 / 2.0	-	
	Input Power (+50°C, 5000h, CW)		824 ~ 849 MHz	+30	dBm	
	Attenuation, min/typ		10 ~ 420 MHz	35 / 44	dB	
			420 ~ 494 MHz	35 / 40	dB	
			494 ~ 764 MHz	27 / 32	dB	
			764 ~ 804 MHz	28 / 30	dB	
			860 ~ 869 MHz	3 / 6.5	dB	
			869 ~ 894 MHz	45 / 54	dB	
			1559 ~ 1606 MHz	30 / 34	dB	
			1710 ~ 1785 MHz	28 / 32	dB	
1920 ~ 1980 MHz			25 / 29	dB		
2110 ~ 2170 MHz			25 / 28	dB		
ANT to Rx		Insertion Loss, typ/max		869 ~ 894 MHz	1.7 / 2.2	dB
				871.5 ~ 891.5 MHz	1.6 / 1.9	dB
		Amplitude Ripple		869 ~ 894 MHz	0.4 / 1.0	dB
		VSWR, typ/max	ANT	869 ~ 894 MHz	1.5 / 2.0	-
			Rx		1.5 / 2.0	-
		Attenuation, min/typ		10 ~ 447 MHz	50 / 60	dB
				447 ~ 824 MHz	42 / 50	dB
				824 ~ 849 MHz	45 / 58	dB
				909 ~ 979 MHz	12 / 20	dB
				1710 ~ 1785 MHz	45 / 62	dB
1850 ~ 1920 MHz	40 / 60			dB		
1920 ~ 2400 MHz	40 / 55			dB		
2400 ~ 2500 MHz	40 / 60			dB		
		4900 ~ 5950 MHz	44 / 60	dB		

SAW DUPLEXER RSD-836.500-881.500-1814-TR-NS6

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Tx to Rx	Isolation, min/typ	824 ~ 849 MHz	55 / 58	dB
		826.5 ~ 846.5 MHz	55 / 58	dB
		869 ~ 894 MHz	52 / 58	dB
		871.5 ~ 891.5 MHz	52 / 55	dB
		1574 ~ 1577 MHz	50 / 60	dB
		1638 ~ 1708 MHz	50 / 60	dB
		2462 ~ 2557 MHz	45 / 60	dB
DC Voltage VDC			3	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	-

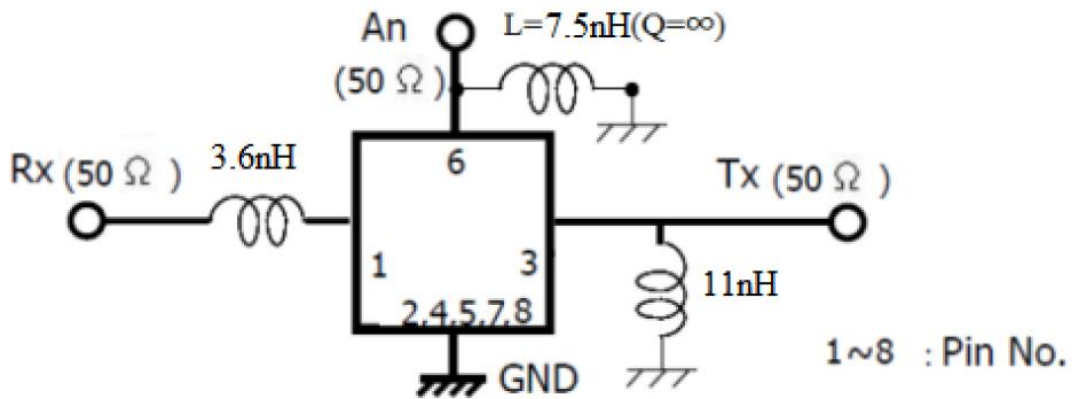
Dimension



Unit: mm

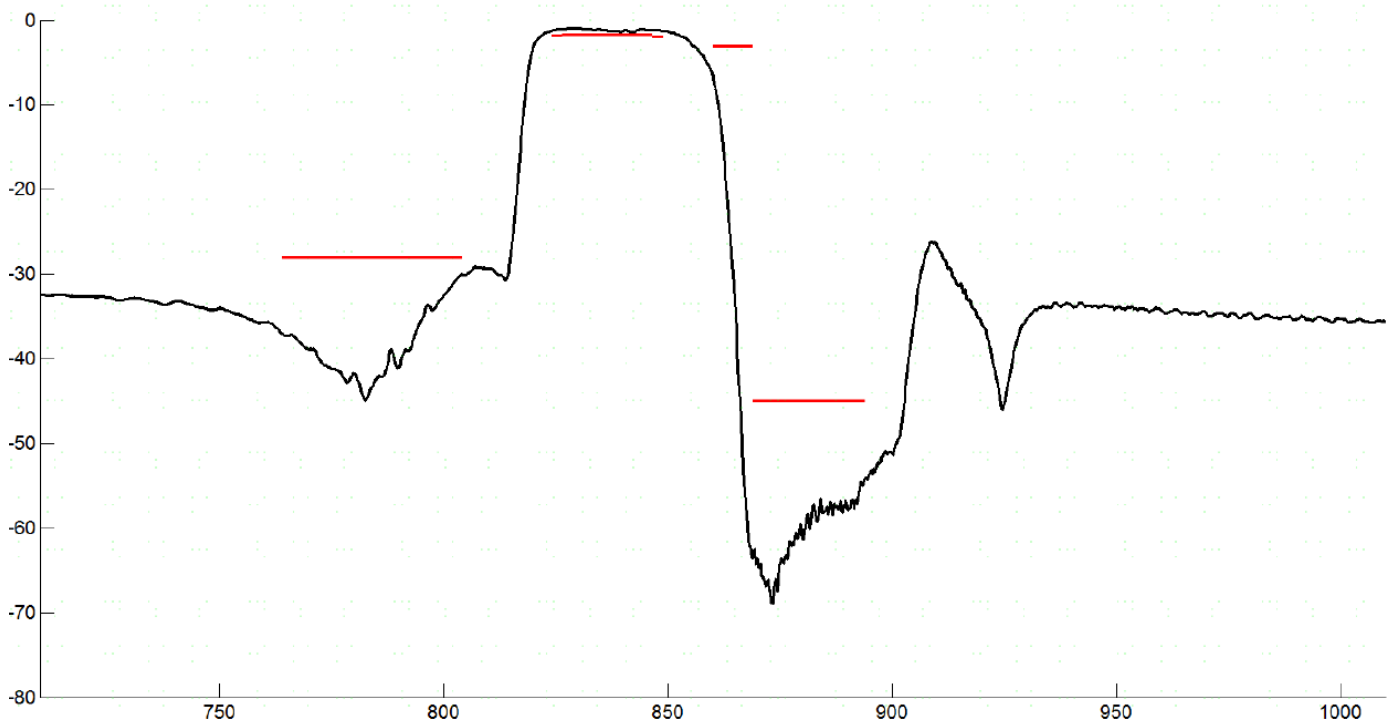
PIN	SYMBOL	FUNCTION
1	Rx	Rx Output
2,4,5,7,8	GND	Ground
3	Tx	Tx Input
6	ANT	Antenna

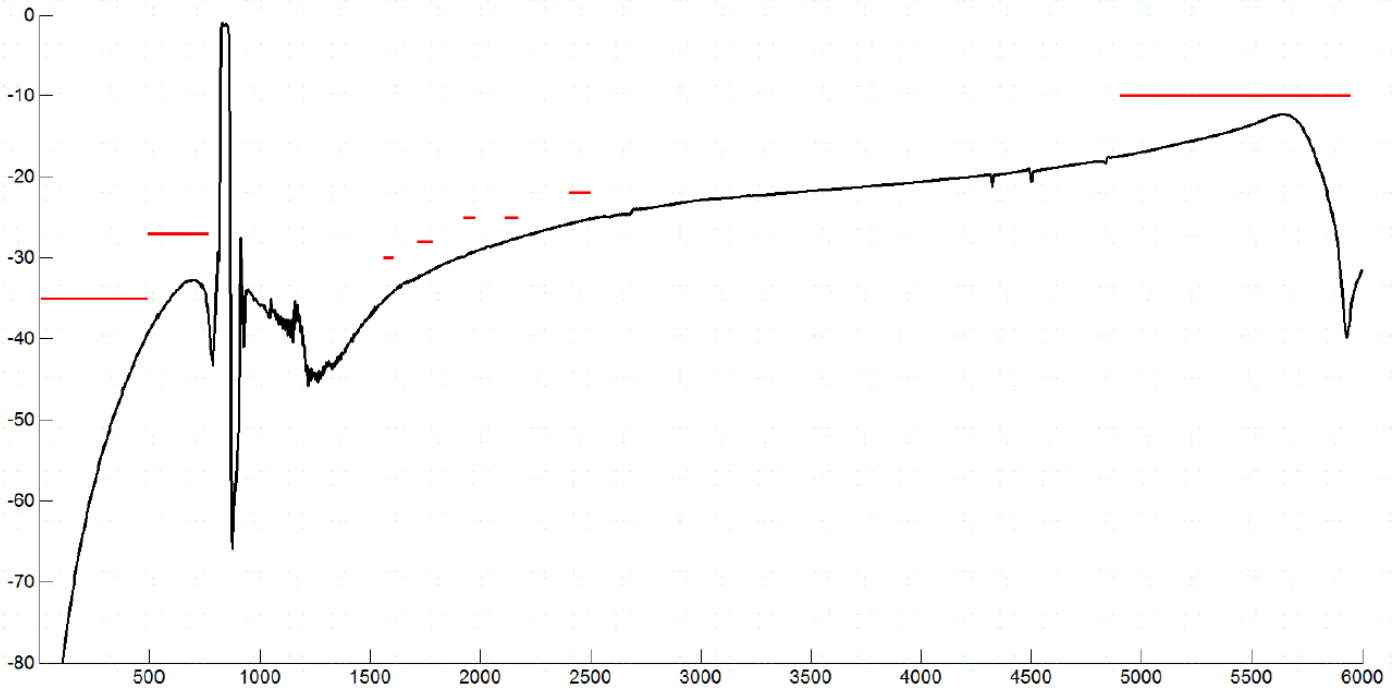
Test Circuit



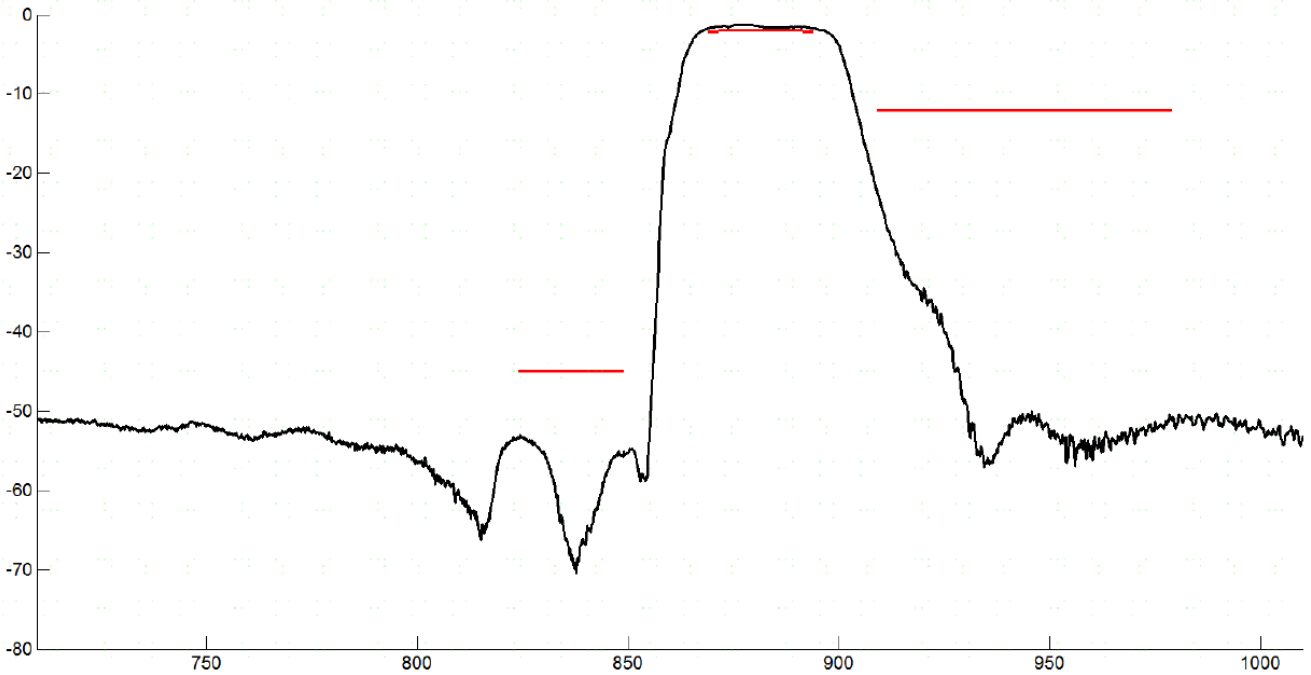
Frequency Characteristics

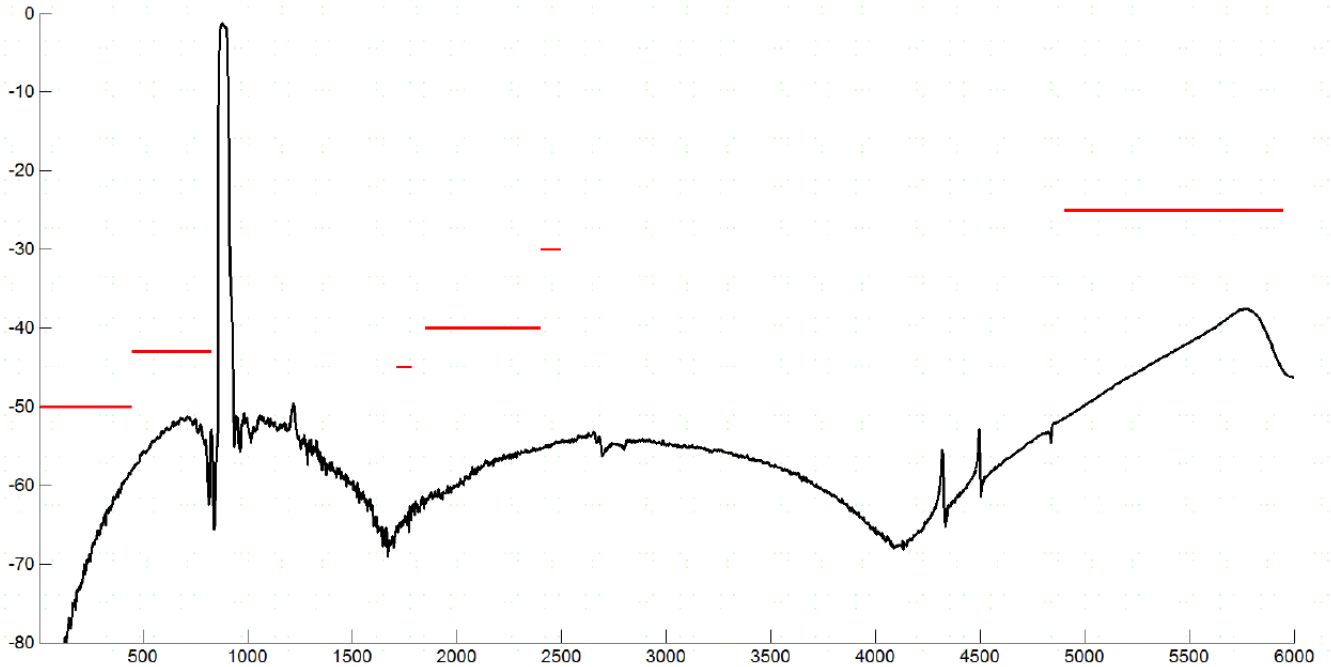
Tx to Ant



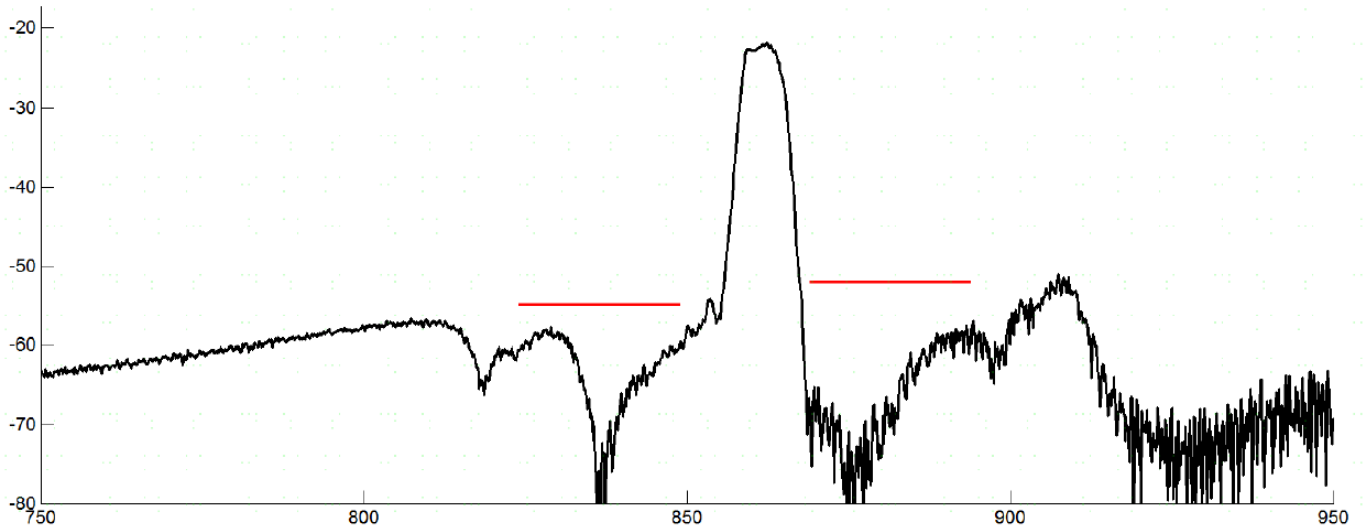


Ant to Rx





Tx to Rx Isolation



APPROVAL

DRAWN BY	AR, April 21, 2020
APPROVED BY	CP, April 21, 2020
REVISION	A, Initial Release



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