RF Modules are ready to use experimental boards. All boards are designed using lumped components, 2mm sockets are provided to connect external 12V DC power supply wherever' required, BNC connectors are provided for giving input signal and taking Output from it. Commonly used BNC-BNC cables are required to connect board with external source or/and spectrum analyzer, without any need of SMA to BNC connector. All modules are designed to operate between 10MHz to 110 MHz. These modules include:

Modules

1. RF -01 RF Filters (Low pass and High pass)
2. RF -02 RF Filters (Band pass and Band Reject)
3. RF -03 Pierce Crystal Oscillator
4. RF -04 NPN Colpitts Crystal Oscillator
5. RF -05 Hartley LC Oscillator
6. RF -06 Clapp Oscillator
7. RF -07 RF Tuned Amplifier
8. RF -08 IF Amplifier
9. RF -09 Mixer Circuit

Scope of Learning

- To observe the frequency response of RF Low pass filter.
- To observe the frequency response of RF High pass filter.
- To observe the frequency response of RF Band reject filter.
- To observe the frequency response of RF Band pass filter.
- To study Pierce crystal oscillator
- To study NPN Colpitts crystal oscillator
- To study Hartley LC oscillator
- To study Clapp oscillator
- To study RF tuned amplifier
- To study IF amplifier
- To study RF Mixer circuit

Technical Specifications

RF Filter (Low pass)	:	# Type: 4th order (Butterworth)
	:	# Cutoff frequency @ 105 MHz
RF Filter (High pass)	:	# Type: 4th order (Butterworth)
	:	# Cutoff' frequency @ 30 MHz
RF Filter (Band Pass)	:	# Type: 3rd order (Butterworth)
	:	# Pass band @ 50 to 80 MHz
RF Filter (Band reject)	:	# Type: 3rd order (Butter-worth)
	:	# Reject band @ 45 to 55 MHz
Pierce crystal oscillator	:	# Output frequency @ 45 MHz
	:	# Level @ -25dBm (85dBuV)
Colpitts crystal oscillator	:	# Output frequency @ 12 MHz
	:	# Level @ -9dBm (98dBuV)
Hartley oscillator	:	# Output frequency @ 40 MHz
	:	# Level @ +7dBm (114dBuV)

Note: Specifications are subject to change.

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