



RF TRAINING SYSTEM RFT01 Technical Specifications:

1. RF Tuned Amplifier Module:

Center freq. : 100-150 MHz typ. varactor tuned

2. RF Oscillators:

a. RFT-02-A Colpitts RF Oscillator Module:

Frequency : >100 MHz typical

b. RFT-02-B Hartley RF Oscillator Module:

Frequency : >100 MHz varactor tunable

c. RFT-02-C Clapp RF Oscillator Module:

Frequency : >100 MHz varactor tunable

d. RFT-02-D Pierce RF Oscillator Module:

Frequency : 48.25 MHz

3. RF Crystal Oscillators:

a. RFT-03-A Feedback Crystal Oscillator Mod.:

Frequency : 10 MHz typical

b. RFT-03-B Colpitts Crystal Oscillator module:

Frequency : 38.9 MHz typical

c. RFT-03-C Butler Crystal oscillator module:

Frequency : above 80 MHz

d. RFT-03-D Crystal frequency multiplier mod.:

2nd harmonic : >10dB fundamental

4. IF Amplifiers:

a. RFT-04-A FM IF amplifier module:

Center freq. : 10.7 MHz

b. RFT-04-B TV VIF amplifier module:

Center freq. : 36.15 MHz

c. RFT-04-C Satellite IF amplifier module:

Center freq. : 479.5MHz typical

5. RF Mixers:

a. RFT-05-A Single ended Diode Mixer:

LO /RF freq. : 500-1000 MHz typical

b. RFT-05-B Single Balanced Diode mixer:

LO/RF freq. : 25-500 MHz typical

c. RFT-05-C Double balanced diode mixer:

RF / LO freq. : 500-1000 MHz typical

d. RFT-05-D Transistor Mixer Module:

LO input typical : 400-600 MHz

Conversion gain : +3dB

6. RF Filters:

a. RFT-06-A1 High Pass Filter Module:

Filter type : Butterworth 7th order

Cut off freq. : 350 MHz typical

b. RFT-06-A2 High Pass Filter Module:

Filter type : Chebyshev 7th order

Cut off freq. : 350 MHz typical

c. RFT-06-B1 Low Pass Filter Module:

Filter type : Butterworth 7th order

Cut off freq. : 350 MHz typical

D. RFT-06-B2 Low Pass Filter Module:

Filter type : Chebyshev 7th order

Cut off freq. : 350 MHz typical

e. RFT-06-C1 Band Pass Filter Module:

Filter type : Butterworth 5th order

F1 & F2 : 100 & 350 MHz typical

F. RFT-06-C2 Band Pass Filter Module:

Filter type : Chebyshev 5th order

F1 & F2 : 100 & 350 MHz typical

g. RFT-06-D Notch Filter Module:

Center freq. : 350 MHz nominal

E-Manual: Installation Video for ease of Learning

List of experiments:

- To measure the center frequency of RF tuned amplifier.
- To measure the gain of RF tuned amplifier module.
- To measure the bandwidth of RF tuned amplifier.
- To measure the variation of center frequency with tuning
- To measure the 1dB compression of RF amp.
- To measure the frequency of RF oscillator.
- To measure the output power level of RF oscillator.
- To measure the frequency and level of various harmonics
- To observe the effect of capacitive feedback ratio
- To observe the effect of voltage on frequency, level, harmonics
- To measure the frequency of RF crystal oscillator.
- To measure the level of RF crystal oscillator.
- To measure the harmonics of RF crystal oscillator
- To measure the frequency pulling characteristic of RF crystal osc
- To measure the phase noise of RF oscillator.
- To measure the center frequency of IF amplifier.
- To measure the gain of IF amplifier modules.
- To measure the bandwidth of IF amplifier modules.
- To measure the 1dB compression of IF amplifier
- To measure conversion gain/loss for mixer.
- To measure the 1dB compression level for mixer.
- To measure the LO/RF, LO/IF isolation for mixer.
- To measure the optimum LO drive level for minimum distortion/conversion loss for mixer.
- To measure the dynamic range for mixer modules.
- To measure VSWR of mixer RF /LO /IF ports.
- To measure the LO/RF frequency range of mixer.
- To measure the IF frequency range of mixer.
- To measure the insertion loss of RF filter.
- To measure the pass band and stop band frequency
- To measure the cut off frequency of RF filters.

Dimensions: 56X41X18 cm Weight: 7 kg. Warranty: 3 yrs.

Mfd by: Amitec Electronics Ltd.

Regd. Off: 504, Nilgiri, Barakhamba Road, New Delhi-110001

Works: 4/32, Site-4, Industrial Estate Sahibabad, UP-201010

amitec@rediffmail.com, www.amitec.co.in

91-120-4371276, 91-9811839949, 91-9810193153

