

RF Design Technology Trainer

Model: YRFDT-1000



YRFDT - 1000 Features

1. Helps users acquire basic RF circuit designing skills.
2. Helps users acquire RF module manufacturing skills.
3. Provides RF circuit measuring practices.
4. Provides chip components' value measuring practices in high frequency band.

YRFDT - 1000 helps users understand basic and important techniques of RF circuit design through theories, manufacturing practices and measuring practices.

YRFDT - 1000 Functions

- 1) Understanding port extension skill.
- 2) Understanding how to measure chip impedance and changes of the impedance.
- 3) Understanding principle of microstrip stub and impedance calculation.
- 4) Understanding RF choke design and characteristic measurement.
- 5) Impedance matching : LC matching converter, Stub matching, LC Matching in transmission line.
- 6) LC filter1 : Understanding types and operation of low pass filter, Implementing them on microstrip lines and measuring characteristic values.
- 7) LC filter2: Designing&manufacturing band pass filter and understand its characteristics.
- 8) Designing, manufacturing and tuning monopole antenna.
- 9) Designing microstrip patch antenna and understanding power feed.

YRFDT - 1000 Training contents

- Chapter 1. Port Extension
- Chapter 2. Measuring Chip Impedance
- Chapter 3. Microstrip stub
- Chapter 4. RF choke
- Chapter 5. Impedance Matching 1
(using lumped element L, C)
- Chapter 6. Impedance matching 2
(using a converter)
- Chapter 7. Impedance matching 3
(using stub matching)
- Chapter 8. Impedance matching 4 (using L and C loaded on transmission line)
- Chapter 9. LC low pass filter
- Chapter 10. LC bandpass filter
- Chapter 11. Monopole Antenna
- Chapter 12. Microstrip Monopole Antenna
- Chapter 13. Microstrip Patch Antenna 1
- Chapter 14. Microstrip Patch Antenna 2
- Chapter 15. Microstrip Patch Antenna 3

YRFDT - 1000 Specifications

Items	Specifications
Frequency Band	20[Mhz] ~ 2[GHz]
Impedance	50[Ω]
Substrate material	FR - 4
PCB thickness	0.8[mm]
Dielectric constant	4.4
Operating Temperature	- 20 ~ 50
Relative Humidity	0% ~95%

YRFDT - 1000 Components

Items	Spec	Q ty
The finished PBA		52 types
Practice and manufacturing RF PCB		56 ea
Chip component (R.LC)	46 kinds	2,300ea (46kinds x 50ea)
Cooper tape	A4	1 ea
Enameled wire	10MT	1 roll
RF Cable		2 ea
Textbook		1 book
Carrying bag		1 ea
Chip components measuring JIG		1 set