

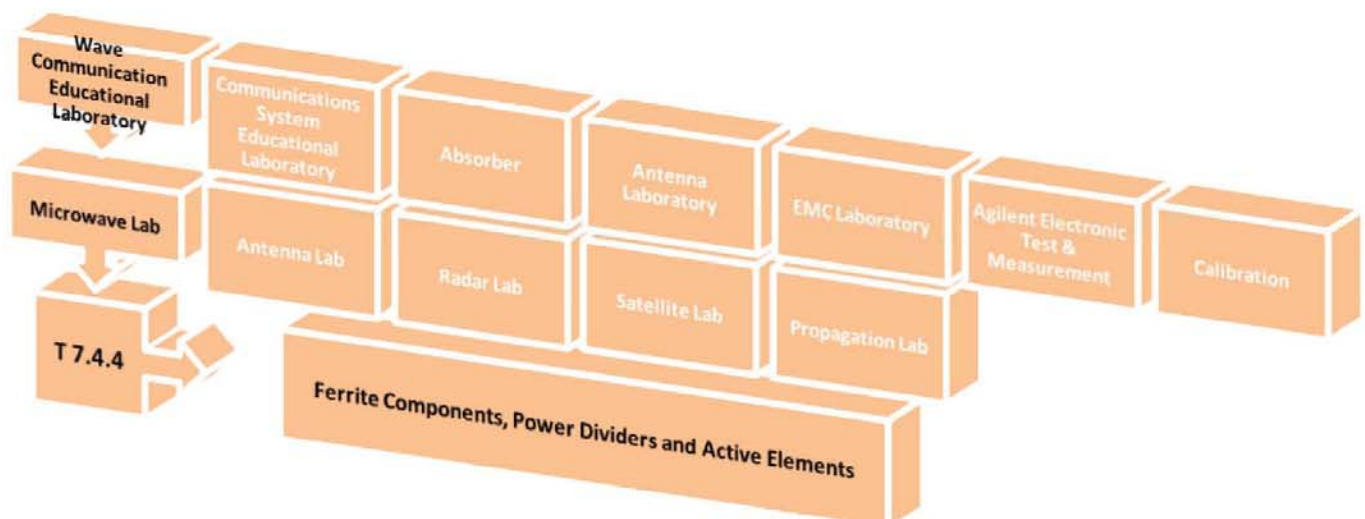
T 7.4.4 Ferrite Components, Power Dividers and Active Elements



The magic-T is a hybrid-T fitted with adapter elements. The illustrated experiment is used to determine coupling loss.

Topics

- PIN modulator
- Phase shifter
- Magic-T
- Isolator
- Circulator



Magic and reality

Complex RF system need components that are able to take advantage of some special effects. For example, non-reciprocal elements like the isolator or the circulator are used to decouple oscillators from reflecting loads. These components often serve to realize duplexers in radar applications. Using the magic-T, balanced mixers and vector adders can be built.



EQUIPMENT SET LIST

Ferrite Components, Power Dividers and Active Elements

QUANTITY	CAT. NO	DESCRIPTION
1	737 01	Gunn Oscillator
1	737 021	Gunn Power Supply with SWR Meter
1	737 03	Coax Detector
1	737 035	Transition Waveguide/Coax
1	737 05	PIN Modulator
1	737 06	Isolator
1	737 065	Circulator
1	737 08	Waveguide Detector
1	737 09	Variable Attenuator
1	737 10	Moveable Short
1	737 111	Slotted Measuring Line
1	737 12	Waveguide 200 mm
1	737 135	3-Screw Transformer
3	737 14	Waveguide Termination
1	737 17	Phase Shifter
1	737 18	Cross Directional Coupler
1	737 195	Magic-T
1	737 22	Set of 4 Slit Diaphragms with Holder
1	737 29	Waveguide Propagation Accessories
1	524 010SUSB	CASSY-Starter USB
1	568 752	Book: Ferrite Components, Power Dividers and Active Elements



Microwaves and space travel

RF technology is certainly at home in the space travel environment. Communications between ground stations and satellites in orbit are accomplished with complex microwave systems.

