

Contents

Part I: Semiconductor Devices

1. Semiconductor Physics
2. P-N Junction Diode
3. Optoelectronic Devices
4. Special Diodes

Part II: Power Supplies

5. D.C. Power Supplies
6. Regulated Power Supplies

Part III: Transistors and Amplifiers

7. Bipolar Junction Transistors (BJTs)
8. Load Lines and D.C. Biasing Circuits
9. Transistor Equivalent Circuits and Models
10. Single-Stage Transistor Amplifiers
11. Multistage Amplifiers
12. Feedback Amplifiers
13. Field-Effect Transistors (FETs)
14. Breakdown Devices and Thyristors

Part IV: Oscillators and Communication Electronics

15. Sinusoidal and Non-Sinusoidal Oscillators
16. Modulation and Demodulation

Part V: Integrated Circuits and Operational Amplifiers

17. Integrated Circuits (ICs)
18. Operational Amplifiers and Their Applications

Part VI: Digital Electronics

19. Number Systems and Codes
20. Logic Gates
21. Boolean Algebra and Logic Families
22. Flip-Flops and Related Devices

Part VII: Electronic Instrumentation

23. Electronic Instruments