

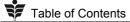
Chapter 1 : Power Semiconductor Devices - Thyristors 1-1 to 1-45

Syllabus: Construction, Static and dynamic characteristics, Specifications / rating of SCR, Triggering circuits (R, R-C, UJT), Commutation circuits (class C and D), Gate Turn Off (GTO), Thyristor (Construction, Working and Application), TRIAC- four mode operation, Triggering of TRIAC using DIAC, **Application-**light dimmer.

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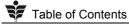
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Chapter 4 : DC - DC Converter 4-1 to 4-34

Syllabus : Principle of operation of chopper, Classification

on the basis of operating quadrants (A, B, C, D, E), **Control Techniques**: CLC, TRC, PWM and FM techniques. Analysis of step-up chopper and numerical with RLE load. Buck boost chopper (Descriptive treatment),

Applications: Chargers for battery operated vehicles.

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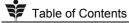
Chapter 5 : Single Phase AC - DC Converter 5-1 to 5-58

Syllabus: Single phase Converter: Fully controlled converter, Half controlled converter (Semi-converter): Operation of all converters with R and RL load, Derivation of Average and RMS output voltage, Power factor, THD, TUF. Numerical based on output voltage and current calculations, Single phase dual converter (Descriptive treatment only), Application: Speed control of DC motor.

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Chapter 9: Three Phase DC-AC Converter 9-1 to 9-39

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