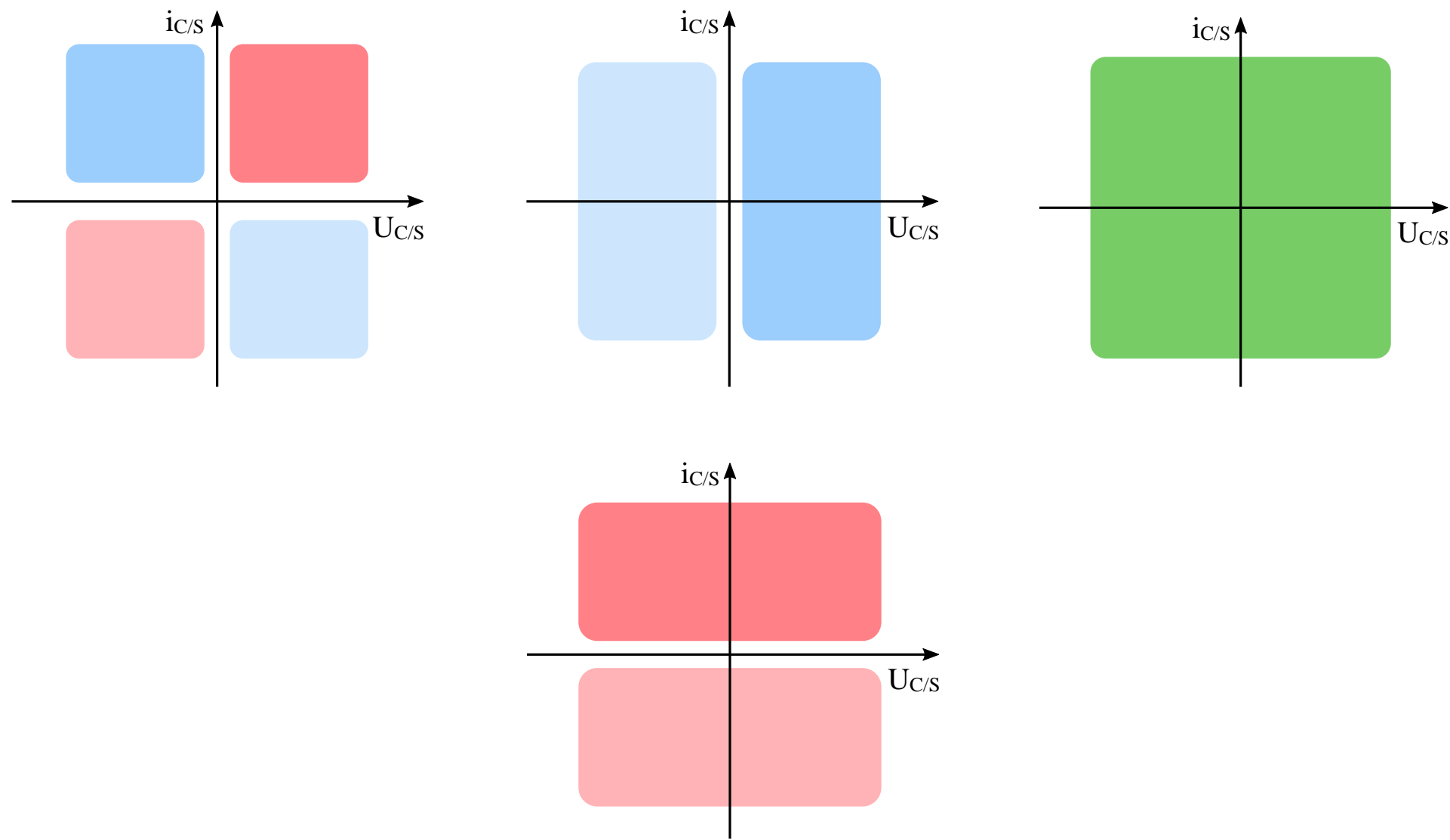


Switch realization

- A switch - one component or more?
- Securing single/multiple quadrant(s) operation.
- Example circuits.

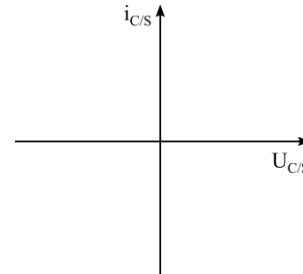
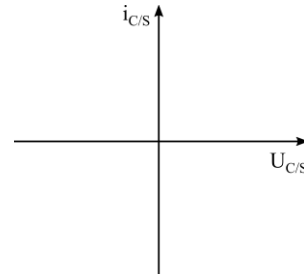
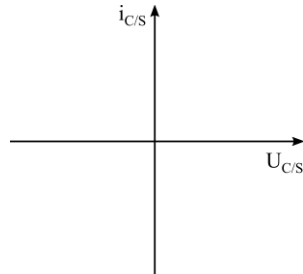
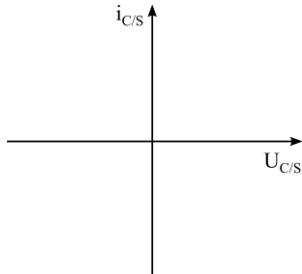
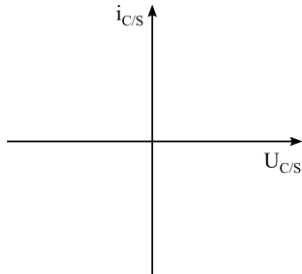
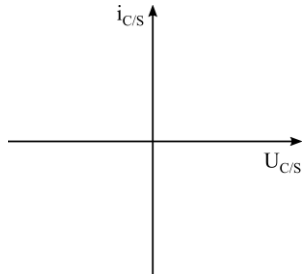
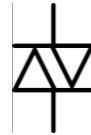
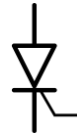
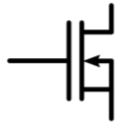
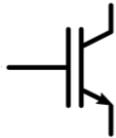
SEMICONDUCTOR DEVICES

What should a switch do in PE devices?



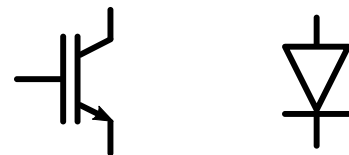
SEMICONDUCTOR DEVICES

Discrete semiconductor devices - I-V curve mapping

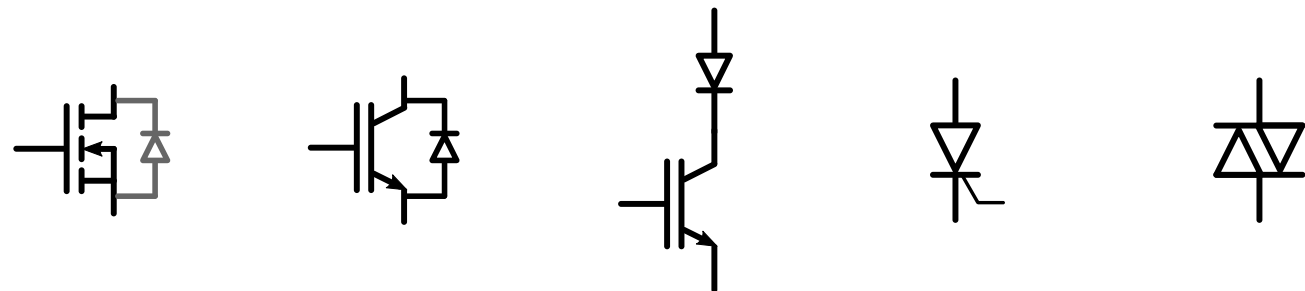


SEMICONDUCTOR DEVICES

Single-quadrant switches:

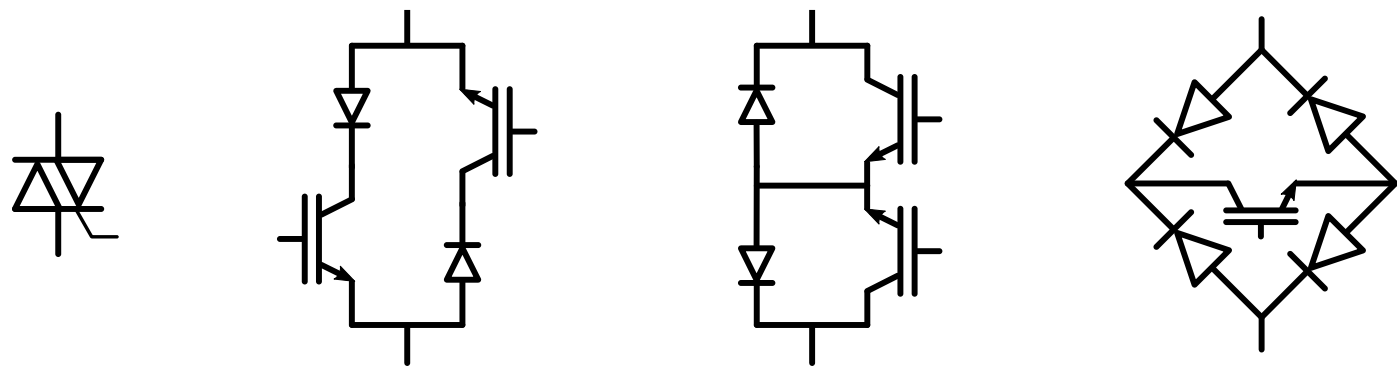


Two-quadrant switches:

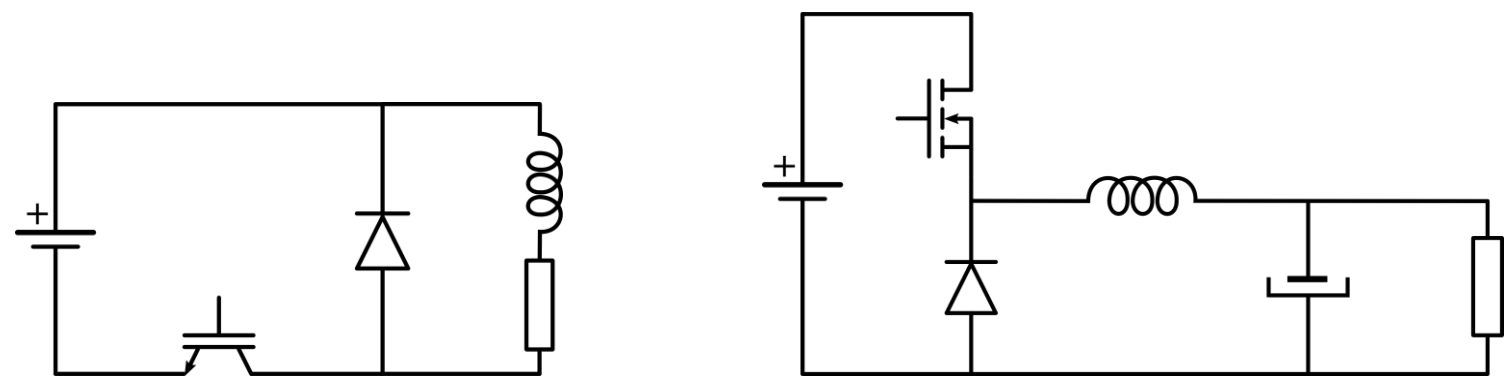


SEMICONDUCTOR DEVICES

Four-quadrant switches:

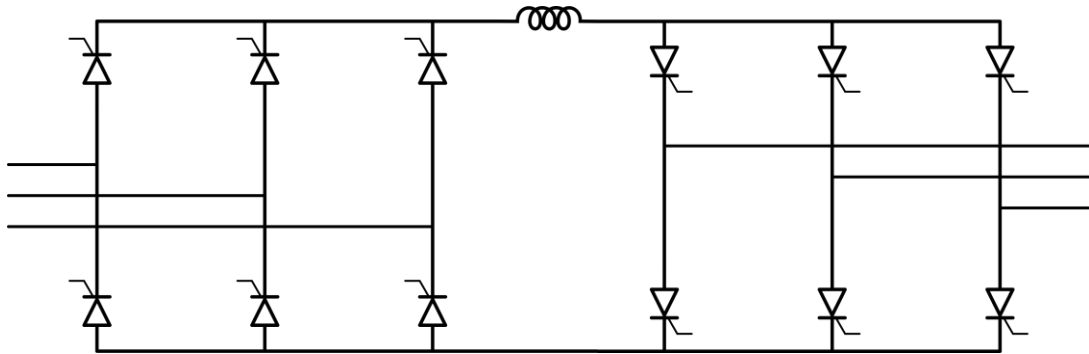
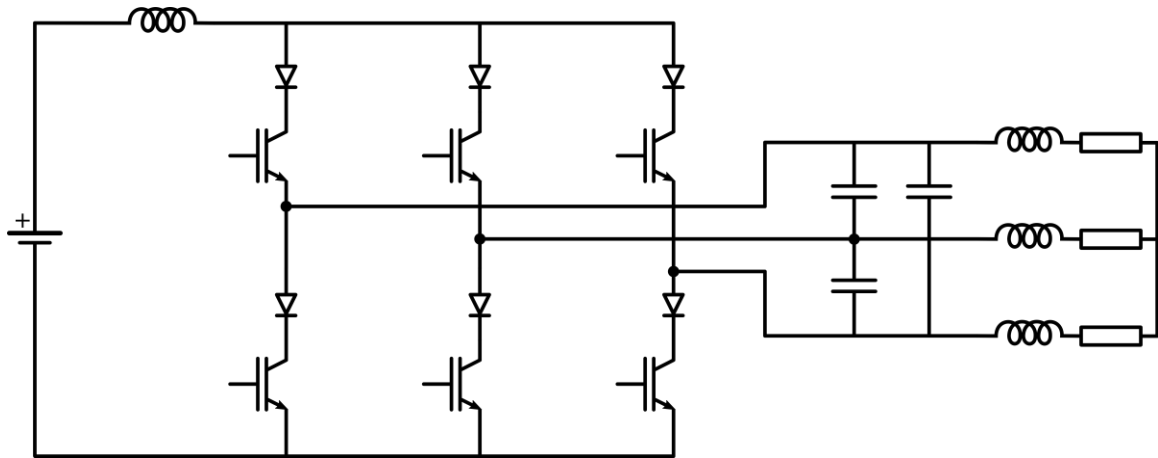
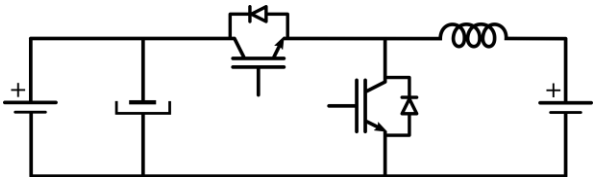
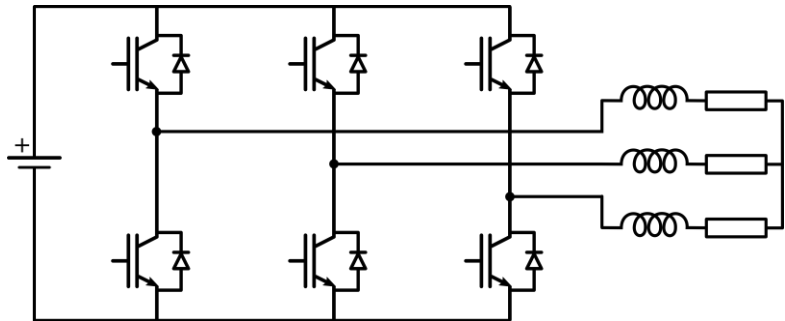


Single-quadrant switches
application example:



SEMICONDUCTOR DEVICES

Two-quadrant switches application example:



SEMICONDUCTOR DEVICES

Additional note - synchronous rectifier:

