* Temperature control for electronics
  + θJC is thermal resistance between Junction and Case1
    - Lower thermal resistance is better to prevent overheating
  + Passive systems
    - Coatings/tapes2
      * Absorptivity and Emissivity controlled
      * Optical Solar Reflectors (OSRS)
      * MLI Blankets
      * Flexible OSR Tapes
      * Radiators can also be coated
    - PCB embedded heat pipes2
      * Rely on phase change
      * Part of the electrical design
    - Thermal straps2
      * Copper or graphene
      * Used commonly in CubeSats due to its flexibility in transferring heat
    - Radiators
  + Active systems
    - Cryocoolers2
      * Very effective, but very heavy (~4kg)
    - Thermal Storage2
      * Phase Change Materials (PCMS) store energy with minimal temperature change

#### References

1 [Junction-to-Case Thermal Resistance in Thermal Design - Technical Articles](https://www.allaboutcircuits.com/technical-articles/junction-to-case-thermal-resistance-in-thermal-design/)

2 Young, J. A. C. (2023). **Next-generation CubeSats and SmallSats thermal control subsystem**. In *Thermal Systems Engineering*. Blue Canyon Technologies, Lafayette, CO, United States.