



An Introduction to Electronics Systems Packaging

Video Course -2012

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Quiz for Module 8

**Thermal Design considerations in systems packaging**

Video Sequence 39

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1. What are the types of heat transfer mechanisms?
  2. Write short notes on: (i) conduction, (ii) convection, (iii) radiation and (iv) mass transport.
  3. Write short notes on: (i) specific heat flow rate, (ii) thermal resistance, (iii) thermal resistivity, (iv) thermal co-efficient and (v) thermal conductivity.
  4. What is the heat flow rate equation? Discuss.
  5. Calculate thermal resistance to the flow of power through a solid square slab of 100 cm length wherein
    - a) the slab is made up of aluminium with thickness of 10 mm.
    - b) the slab is made up of glass with thickness of 5 mm.
    - c) the slab is made up of steel with thickness of 2 mm.
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