Unit 2 — Power Rating and Heat Sinking Components

TRUE/FALSE

1. Heat sinks vary in size and shape, but have only one purpose.

   ANS: T PTS: 1 REF: Heat Sinks

2. The purpose of a heat sink is to decrease the surface area of the device connected to it.

   ANS: F PTS: 1 REF: Heat Sinks

3. The surface of the device and heat sink may look perfectly flat to the naked eye.

   ANS: T PTS: 1 REF: Heat Sinks

4. Using thermal compound when heat sinking components is not a necessity.

   ANS: F PTS: 1 REF: Heat Sinks

5. Small heat sinks are generally used when a component is operated at its lowest power rating.

   ANS: F PTS: 1 REF: Heat Sinks

MULTIPLE CHOICE

1. Electrical and electronic components have a power rating measured in ____.
   a. volts
   b. ohms
   c. watts
   d. amps

   ANS: C PTS: 1 REF: Power Rating

2. The ____ rating indicates the amount of heat that the component can dissipate before damage occurs.
   a. power
   b. energy
   c. resistance
   d. current

   ANS: A PTS: 1 REF: Power Rating

3. The thermal compound that is greasy and generally white in color is made from ____.
   a. sodium oxide
   b. magnesium peroxide
   c. beryllium perchlorate
   d. beryllium oxide

   ANS: D PTS: 1 REF: Heat Sinks

4. When a component is mounted to a heat sink, ____ is generally used to ensure a good thermal contact between the device and the heat sink.
   a. thermal compound
   b. insulation compound
   c. resistance compound
   d. break compound

   ANS: A PTS: 1 REF: Heat Sinks

5. ____ is used to fill in the gaps between the two surfaces and provide good thermal contact.
   a. Insulation compound
   c. Break compound

b. Thermal compound
d. Lock compound

ANS: B
PTS: 1
REF: Heat Sinks