

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 c. watts
b. ohms 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 c. resistance
b. energy 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 c. beryllium perchlorate
b. magnesium peroxide 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 c. resistance compound
b. insulation 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