

In the Name of God

Quiz 2

Name:

Course: Power Electronics

Student Number:

1- Which Switch has fast switching speed?

- 1) BJT 2) MCT 3) IGBT 4) MOSFET

2- The maximum junction temperature of a transistor is $T_j = 150^\circ C$ and the ambient temperature is

$T_A = 25^\circ C$. If the thermal impedances are $R_{JC} = 0.4^\circ C/W$, $R_{CS} = 0.1^\circ C/W$ and $R_{SA} = 0.5^\circ C/W$.

Calculate:

- a) The maximum power dissipation.
b) The case temperature.

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