Test condition:

1. Measure the thermal couple under surface temperature, Tc is 58.1°C
2. TPS54426 the θ_{JC}= 51.3(°C/W)
3. P_D=0.85 Watt.
4. This package have the Thermal pad. (We have to mount a PCB).
5. Not include Thermal pad condition T_J=101.7°C

Question:

How could I evaluation of T_J? (Need consider the Thermal pad condition)

Q1.How to use this formula (T_J=P_D*θ_{JC}+T_C) to calculateT_J?

(Need consider Thermal pad containing proportional relationship both with Tc.)

Q2.Why the θ_{JC} > θ_{JA} from the TPS54426 specification?

(formula θ_{JA}=θ_{JC}+θ_{JA}, normally the θ_{JA} > θ_{JC})