



$$P_d = (21.4330 - 16.35) * 0.48 = 2.43984 \text{ W, Minimum}$$

$$P_d = (24.2113 - 13.85) * 0.48 = 4.97342 \text{ W, Maximum}$$

LM317HVK Minimum input voltage:

$$V_{ref}: 1.2 \leq 1.25 \leq 1.3 = +4\%$$

$$\text{Long term stability} = +1\%$$

$$\text{Temperature stability} = +1\%$$

$$1\% \text{ resistor tolerances for R1 and R2} = +1\%^2$$

$$\text{Total} = 4\% * 1\%^2 = 8.22\%$$

$$\text{Adj current: } 0 \leq 50\text{E-6} \leq 100\text{E-6} = +1330 * 100\text{E-6} = 0.133 \text{ V}$$

$$\text{Drop out: } +2.5 \text{ V}$$

$$((1.25 * (1 + (1330 / 121)))) * 1.0822) + 0.133 + 2.5 = 18.86 \text{ V}$$