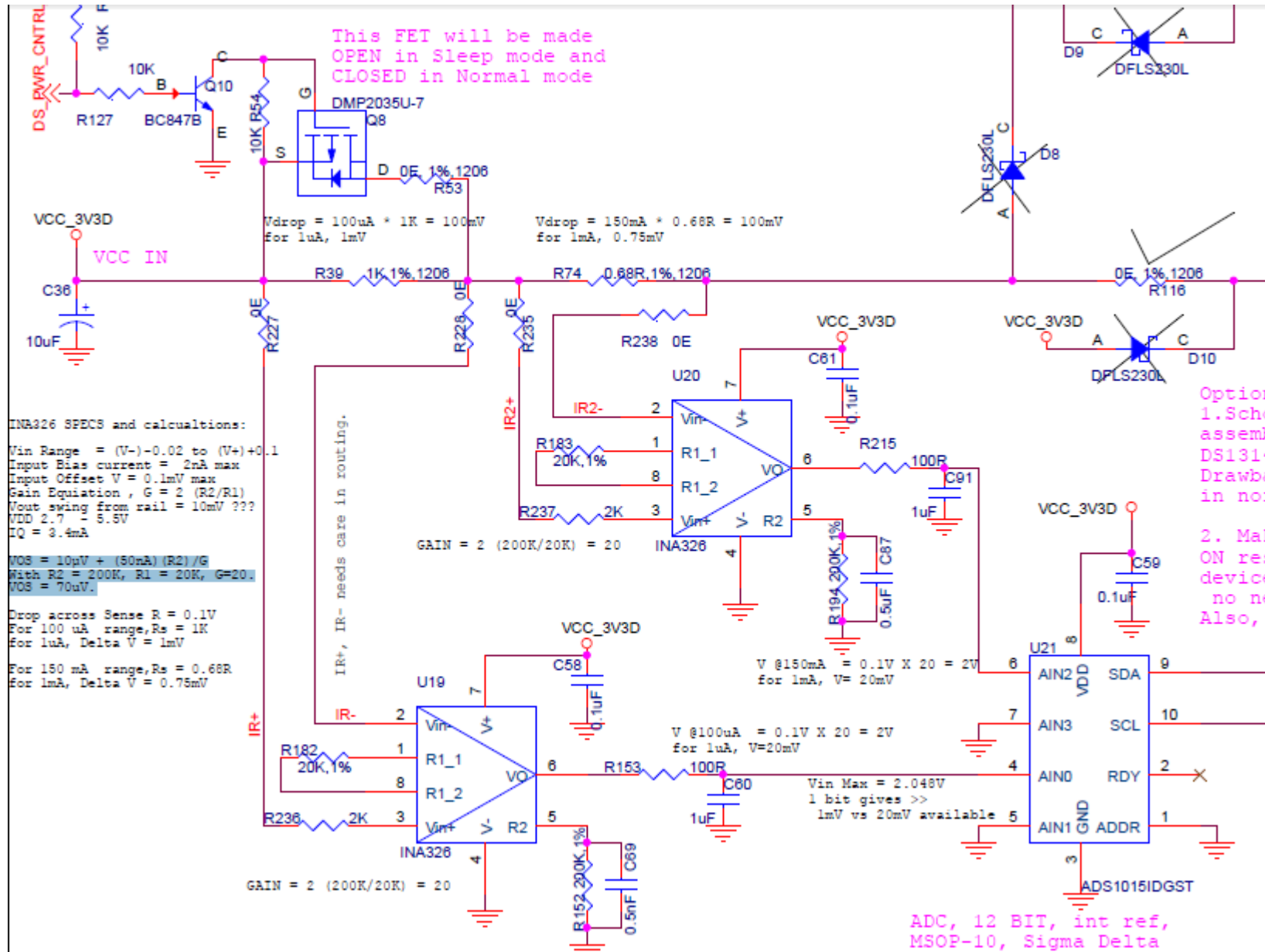


# uA to mA Measurement using INA326

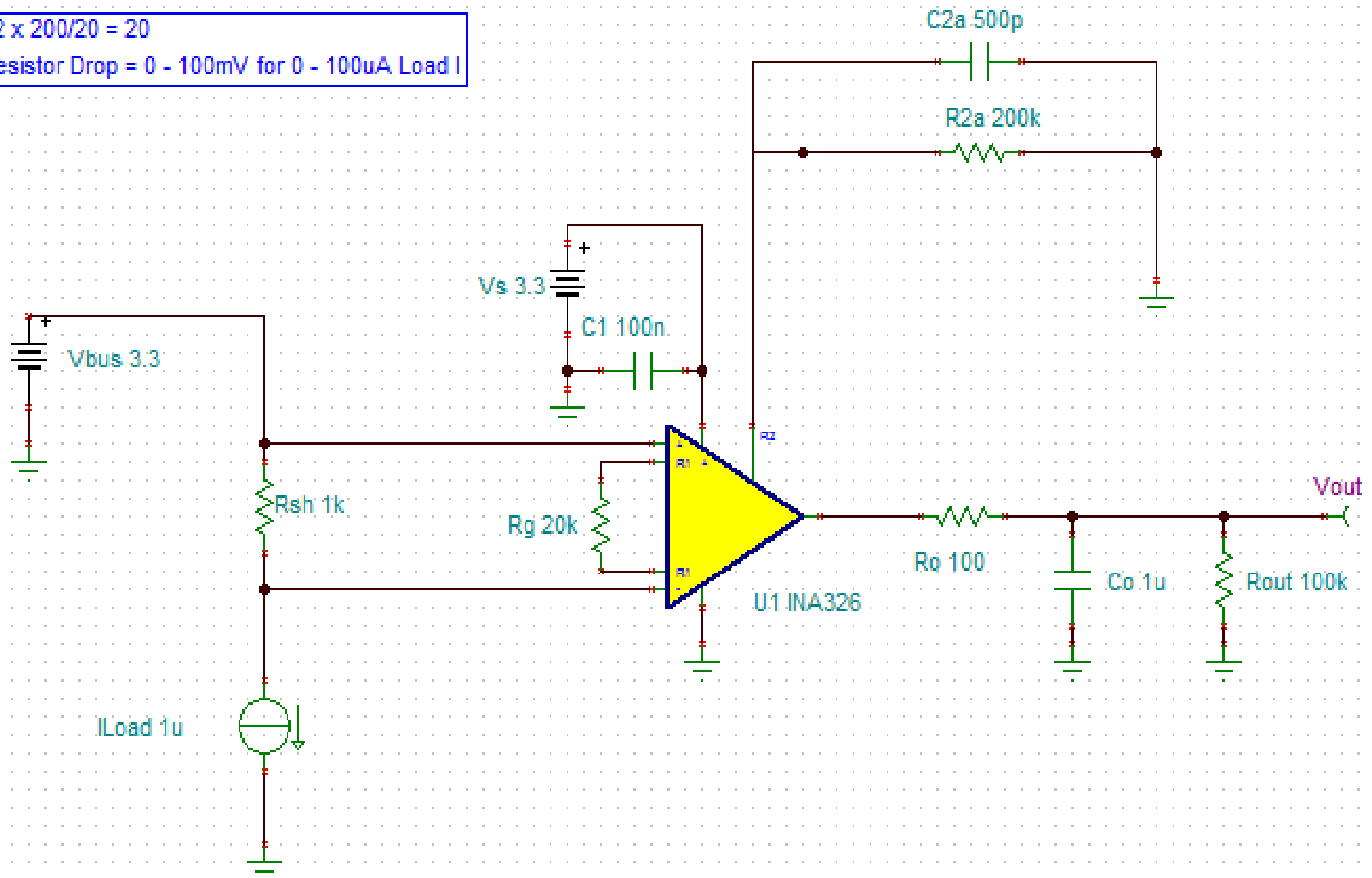
Anil  
02/Dec/2014

# Original Schematic

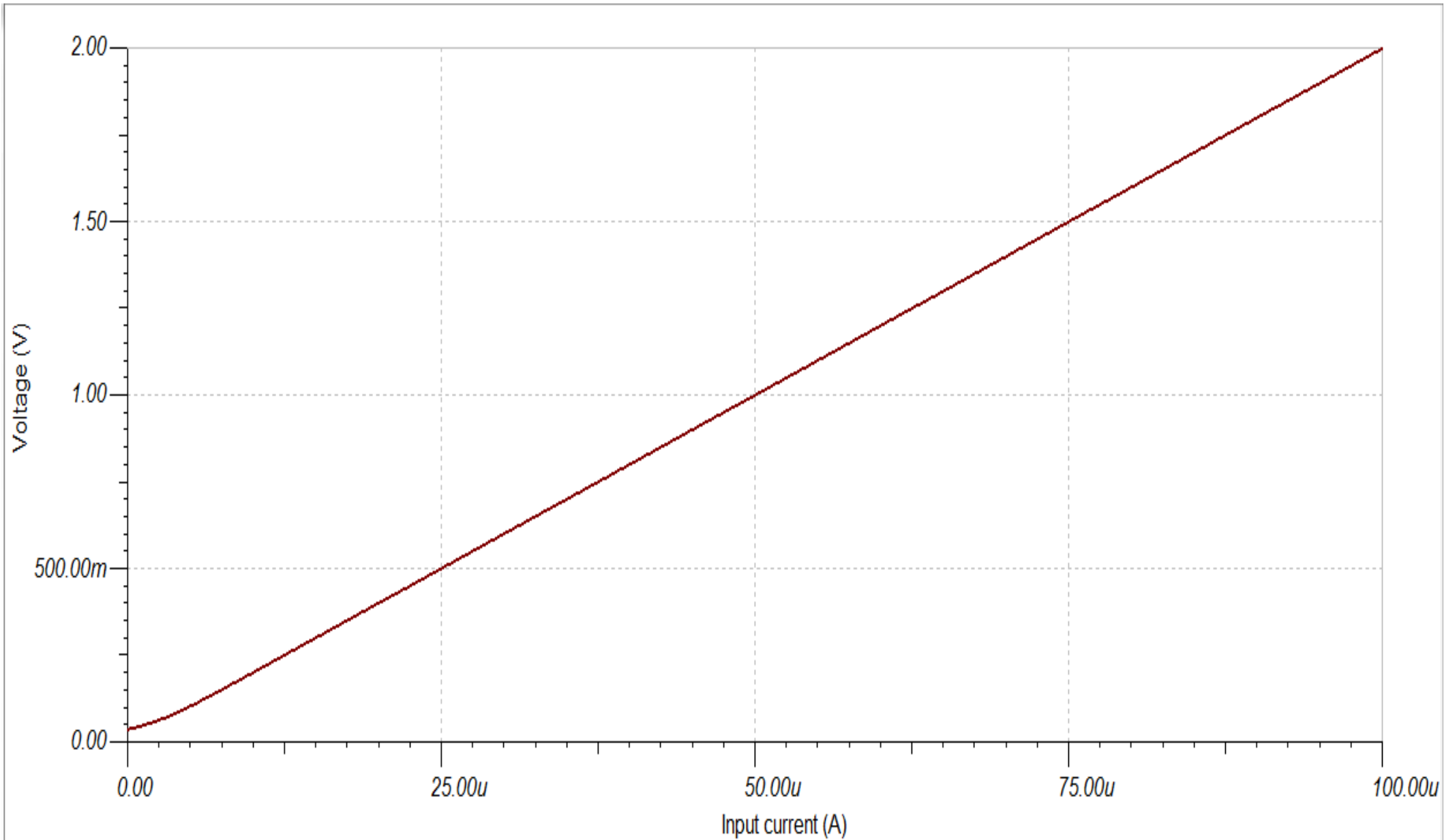


# Simulation Schematic (uA range)

Gain =  $2 \times 200/20 = 20$   
Sense Resistor Drop = 0 - 100mV for 0 - 100uA Load I

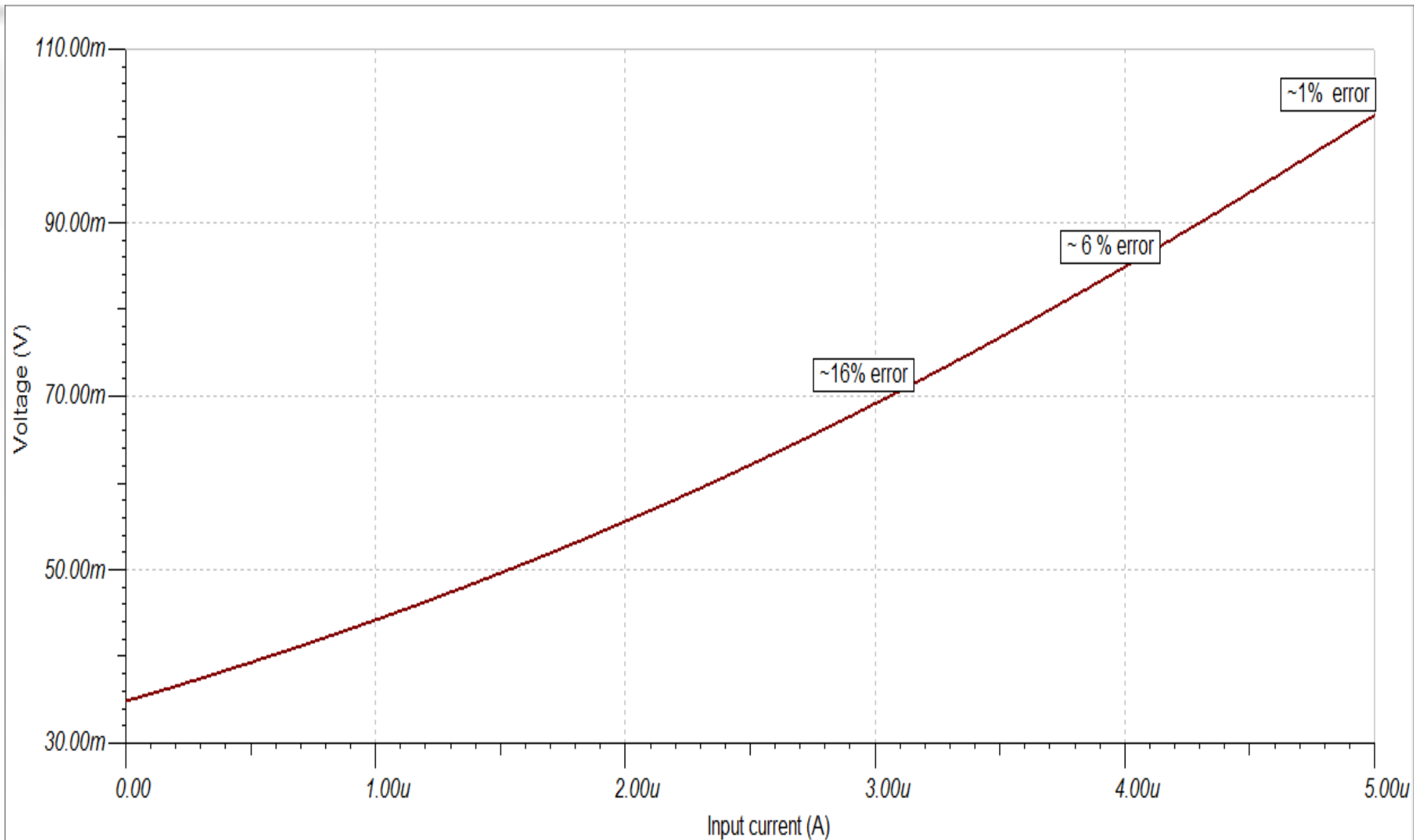


# Sim results (uA Range)



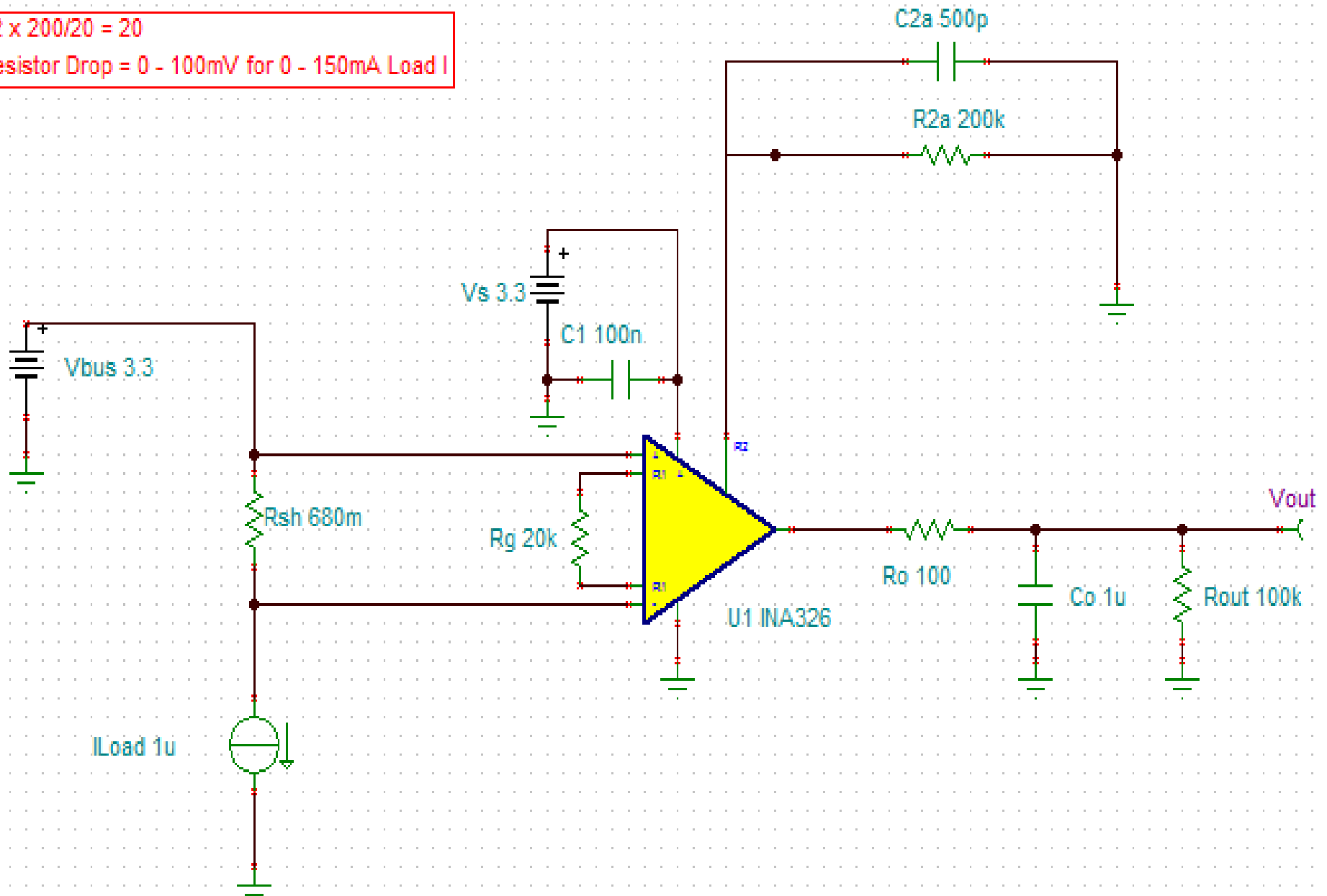
# Sim results (0-5 $\mu$ A )

( error if not compensated in firmware)

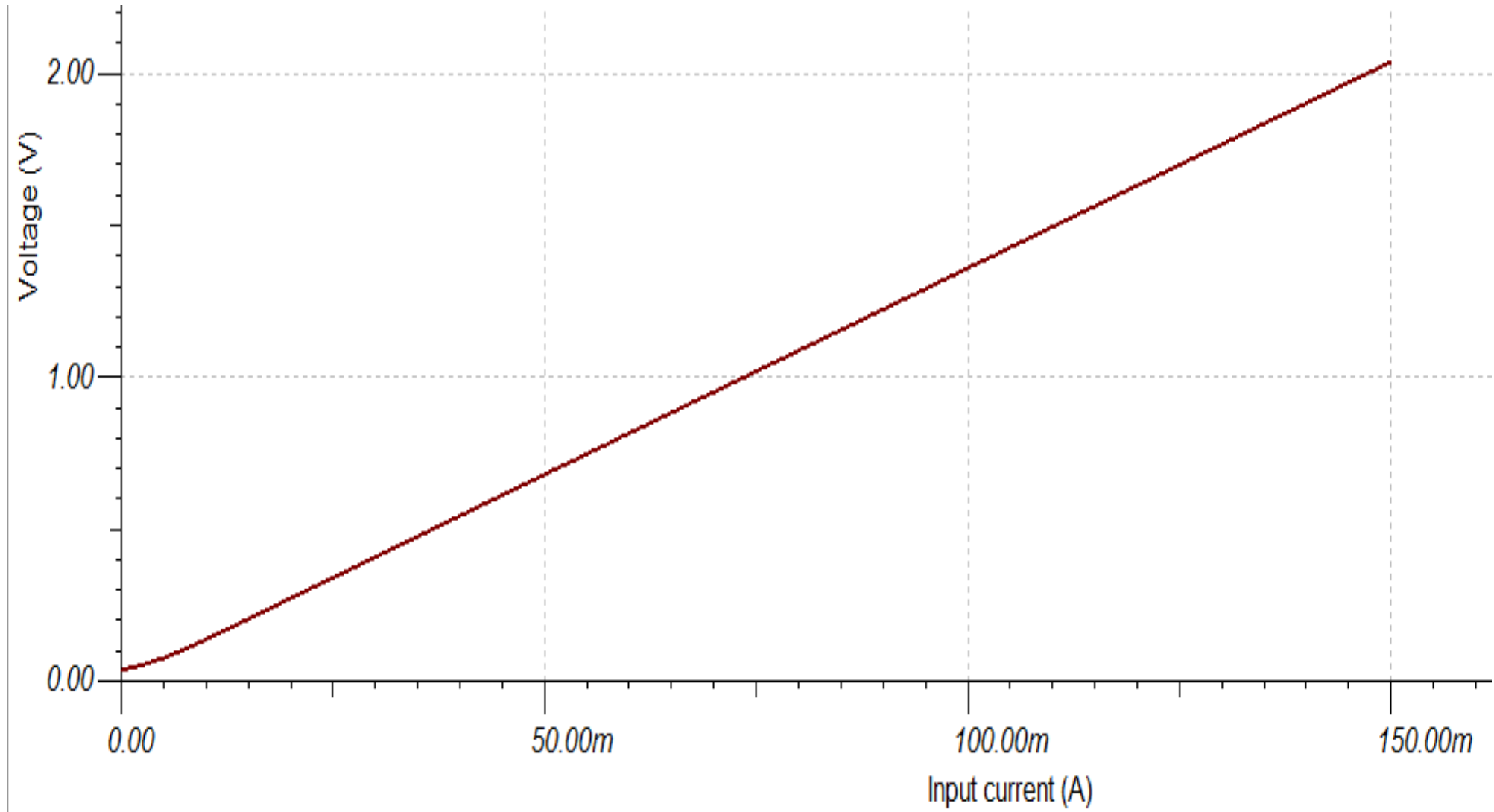


# Sim Schematic (mA Range )

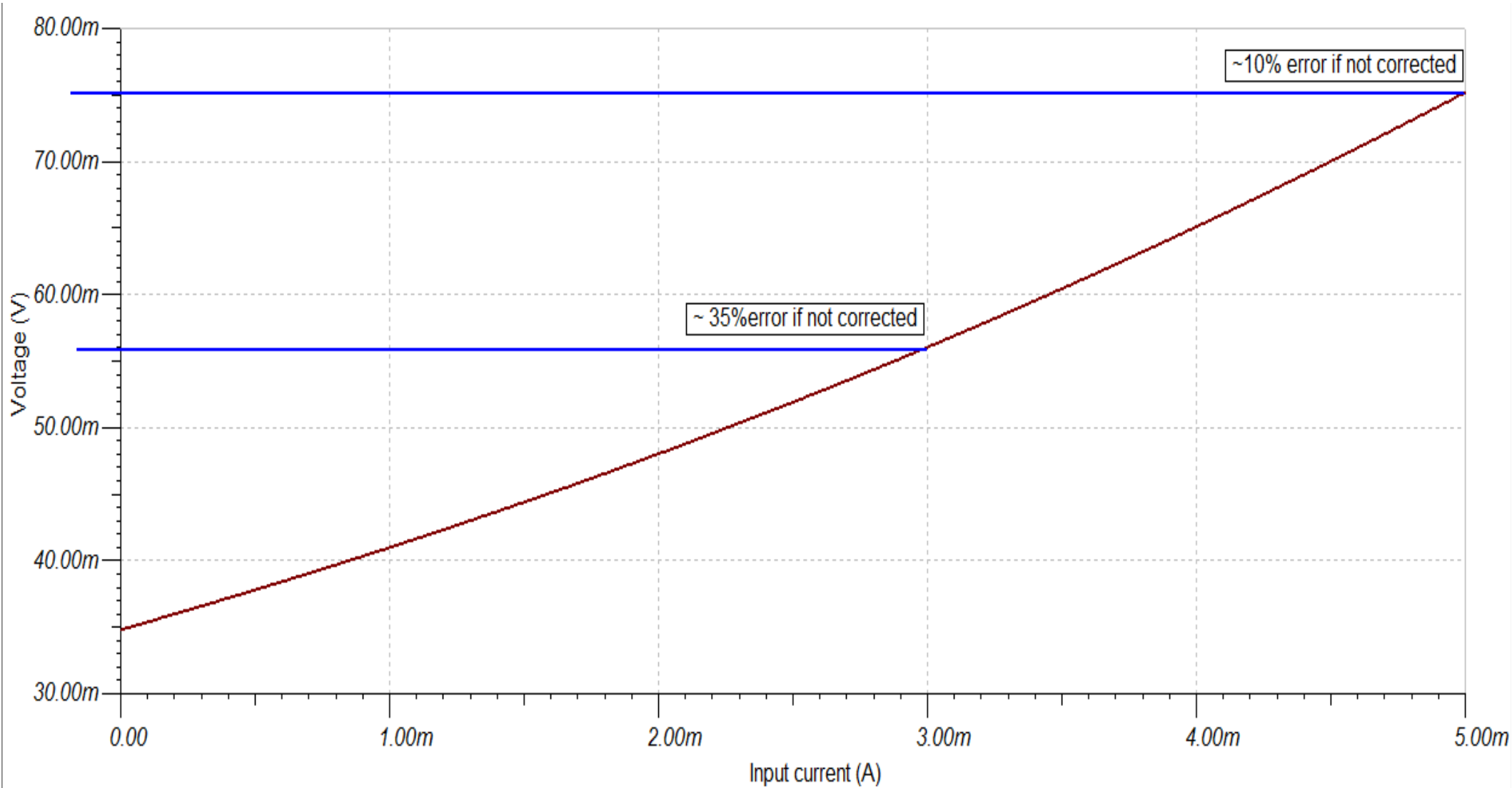
Gain =  $2 \times 200/20 = 20$   
Sense Resistor Drop = 0 - 100mV for 0 - 150mA Load I



# Sim Results (mA Range )



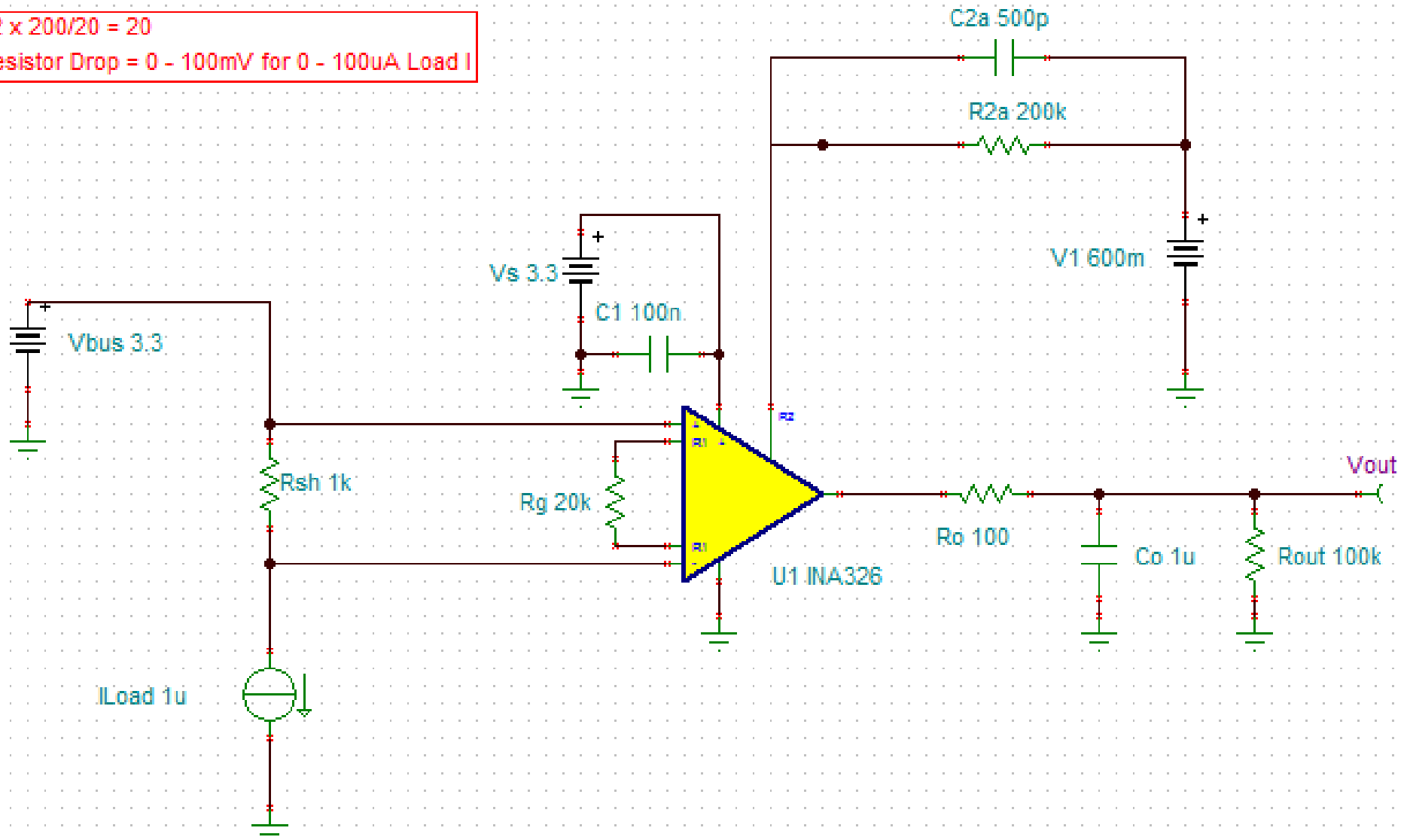
# Sim Results (0-5mA)



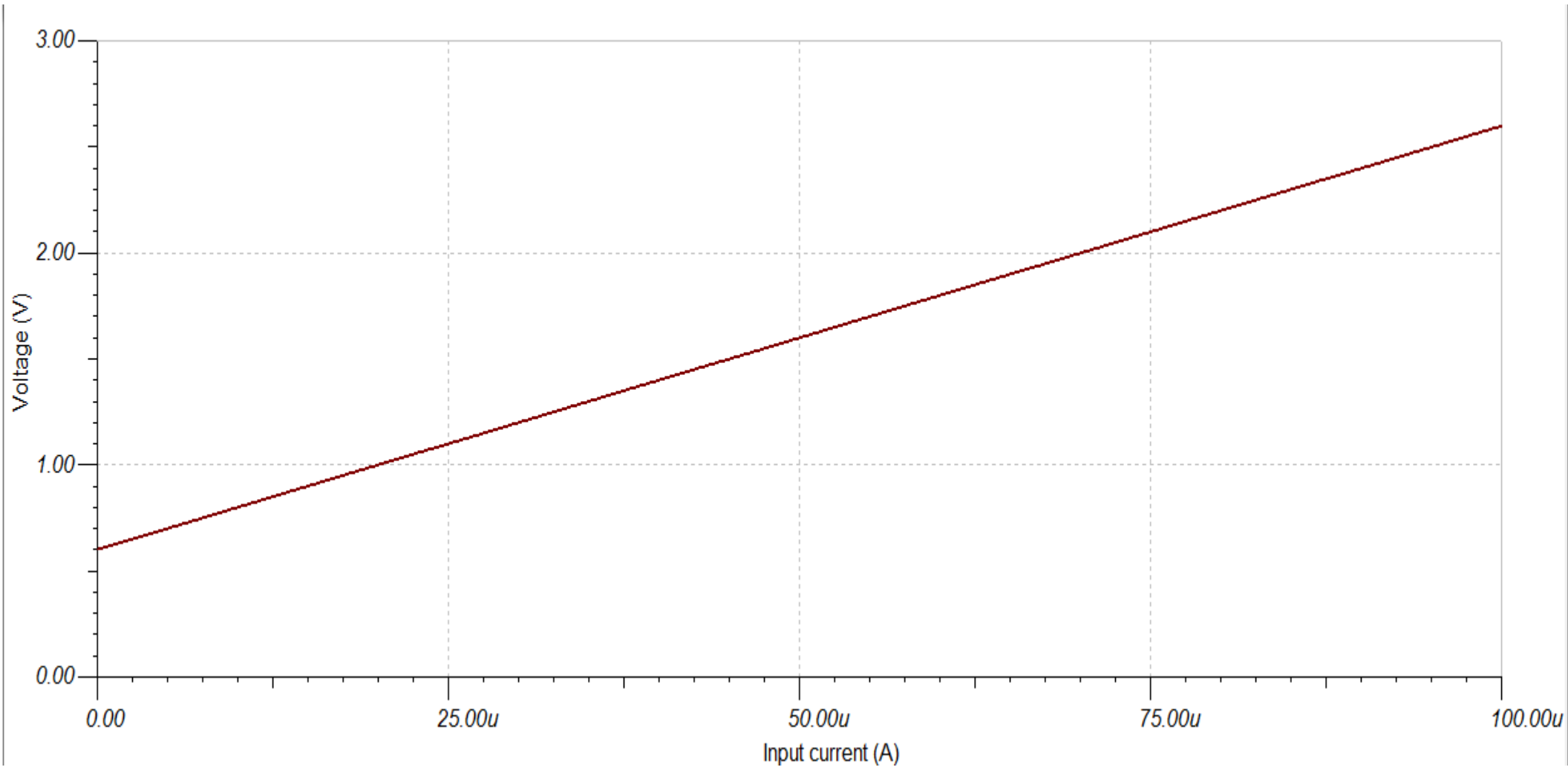


# Sim Sch (uA Range), with 0.6V ref as offset

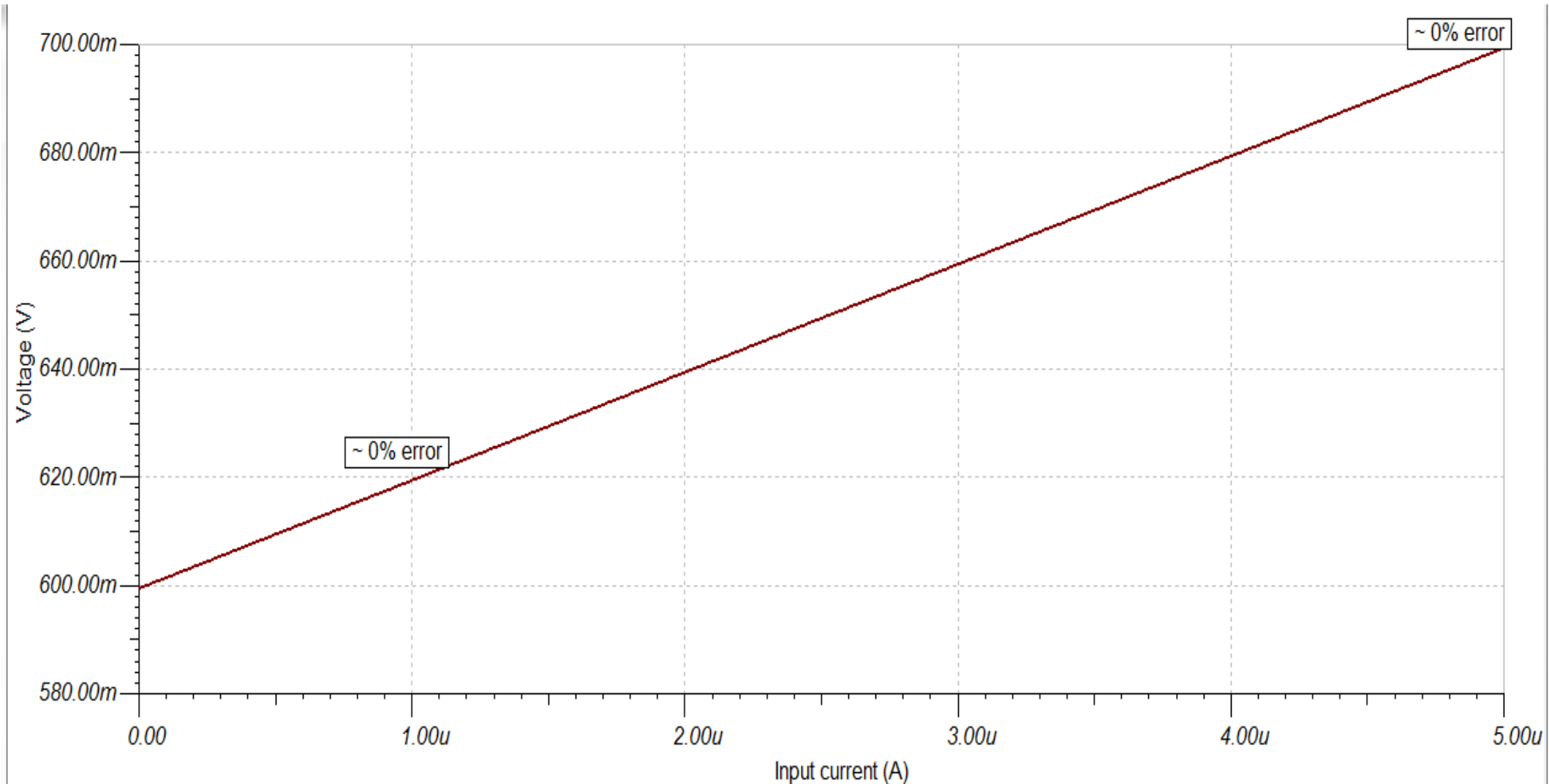
Gain =  $2 \times 200/20 = 20$   
Sense Resistor Drop = 0 - 100mV for 0 - 100uA Load I



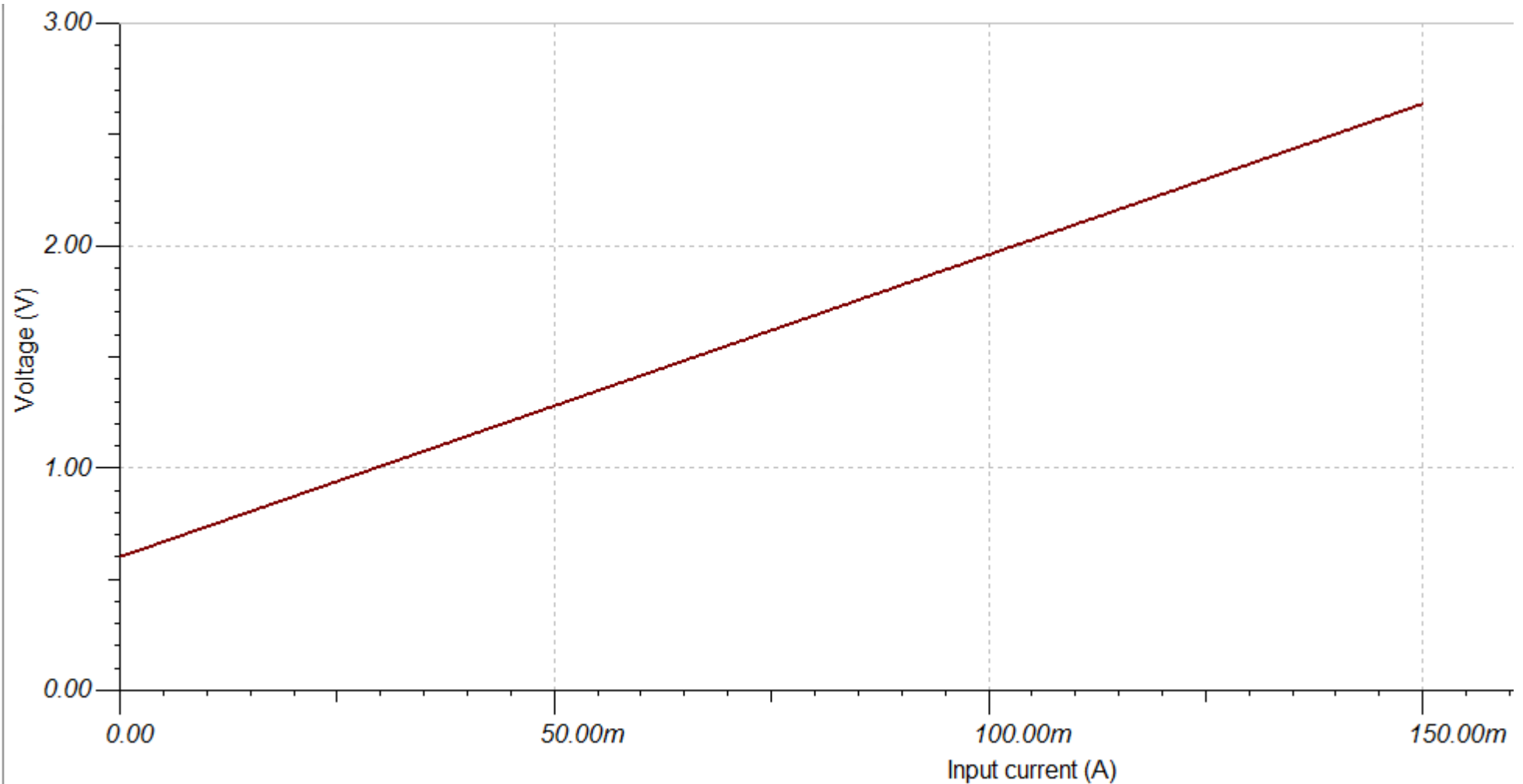
# Sim Results ( $\mu\text{A}$ Range), with 0.6V ref as offset



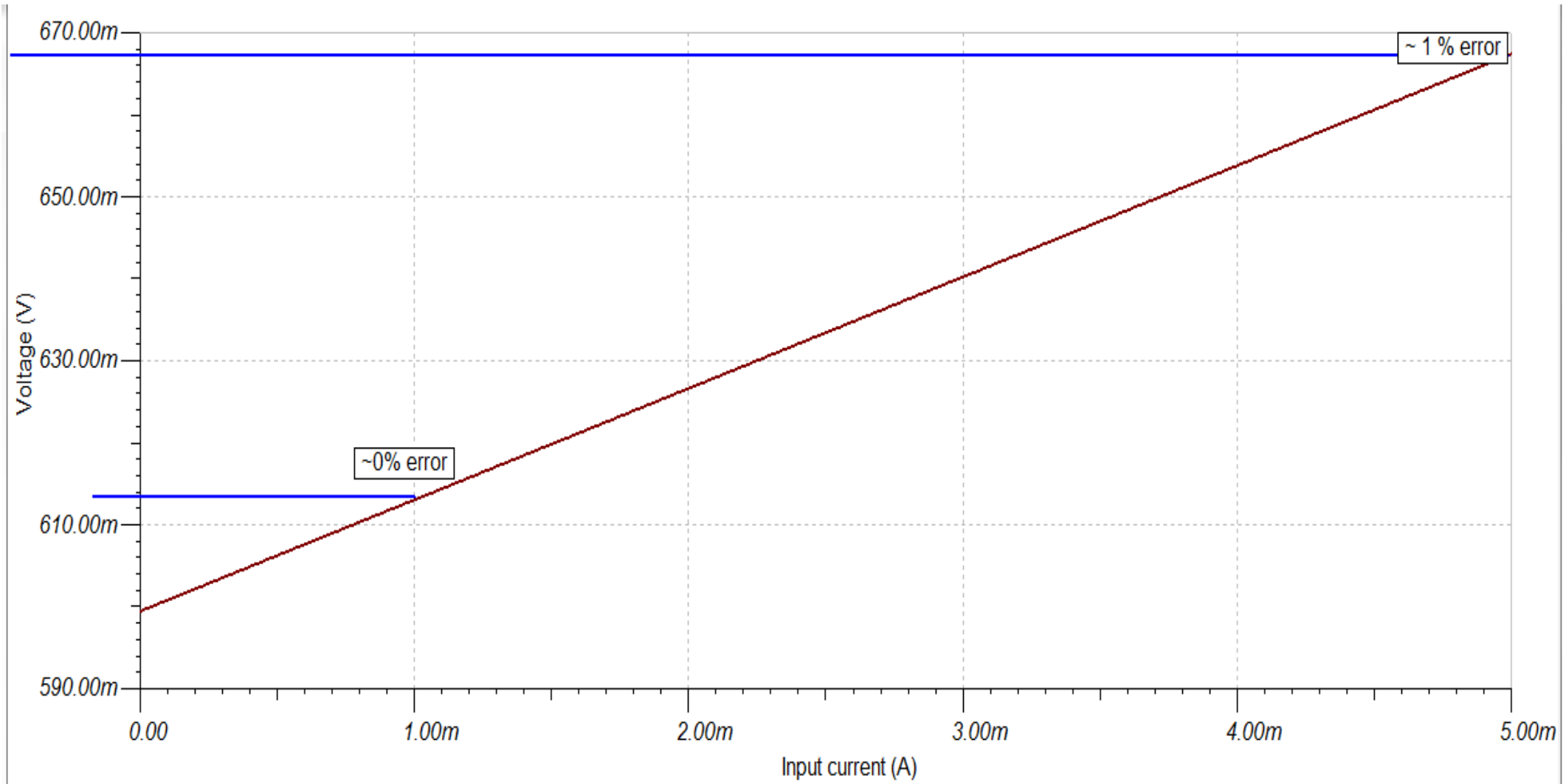
# Sim Results (0-5uA Range), with 0.6V ref as offset



# Sim Results (mA Range), with 0.6V ref as offset



# Sim Results (0-5mA Range), with 0.6V ref as offset



# 0.6V Ref Selection

25 $\mu$ A Micropower Voltage Reference From Intersil

ISL21070

o/p Current capability of +/- 10mA

<http://www.intersil.com/content/dam/Intersil/documents/isl2/isl21070.pdf>