

LISTA 3-II

quinta-feira, 18 de novembro de 2021

17:32

$$(18) A_{v2} = \frac{R_4}{R_1} \left(\frac{R_1 + R_2}{R_3 + R_4} \right)$$

$$A_{v2} = \frac{45K}{10K} \cdot \left(\frac{10K + 50K}{10K + 45K} \right)$$

$$A_{v2} = 4,909$$

$$A_{v1} = -\frac{R_2}{R_1} = -\frac{50K}{10K} = -5$$

$$A_d = (A_{v1} - A_{v2}) / 2$$

$$A_d = [-4,909 - 5] / 2$$

$$A_d = -4,954$$

$$A_c = \frac{R_1 \cdot R_4 - R_2 \cdot R_3}{R_1 \cdot R_3 + R_1 \cdot R_4} = \frac{10K \cdot 45K - 50K \cdot 10K}{10K \cdot 10K + 10K \cdot 45K} = \frac{-50 \times 10^6}{100 \times 10^6 + 450 \times 10^6} =$$

$$A_c = -0,0909$$

$$CMRR = \frac{A_d}{A_c} = 54,499$$

$$CMRR(dB) = 34,72dB$$