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$$CMRR = 80 \text{ dB}$$

BALANCEADO

$$CMRR = 10^{\left(\frac{80}{20}\right)} = \frac{10.000}{\cancel{14.000}} = \text{ERRADO}$$

$$R_1 = 20 \text{ K}\Omega + 2\% = 20,4 \text{ K}\Omega$$

$$R_2 = 50 \text{ K}\Omega - 2\% = 49 \text{ K}\Omega$$

$$R_3 = 20 \text{ K}\Omega - 2\% = 19,6 \text{ K}\Omega$$

$$R_4 = 50 \text{ K}\Omega + 2\% = 51 \text{ K}\Omega$$

$$A_c = \left(\frac{R_1 \cdot R_4 - R_2 \cdot R_3}{R_1 \cdot R_3 + R_2 \cdot R_4} \right)$$

$$A_c = \frac{80 \times 10^6}{1,44024 \times 10^8} = 0,555$$

$$CMRR = A_d / A_c = 43,77_{\text{LINEAR}}$$

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

$$A_{v2} = \frac{51 \text{ K}}{20,4 \text{ K}} \cdot \left(\frac{20,4 \text{ K} + 49 \text{ K}}{19,6 \text{ K} + 51 \text{ K}} \right)$$

$$A_{v1} = - \frac{R_2}{R_1} = - \frac{49 \text{ K}}{20,4 \text{ K}} = -2,402$$

$$A_d = \left(\frac{-2,402 - 2,457}{2} \right)$$

$$20,4K \setminus 19,6K + 51K \setminus$$
$$Av_2 = 2,457$$

$$Ad = -2,4295^2$$