

Differential Mode and Common Mode Operation

Differential Voltage $V_{DV} = V^+ - V^-$

Differential Gain $DG = |V_{out} / V_{DV}|$

Common Mode Voltage $V_{CMV} = (V^+ + V^-) / 2$

Common Mode Gain $CMG = |V_{out} / V_{CMV}|$

Common Mode Rejection Ratio $CMRR = DG / CMG$ $CMRR \text{ dB} = 20 \log(DG/CMG)$

Ideal $CMG = 0$ $CMRR = \infty$

Typical Values $CMRR = 80\text{dB} = 10^4$