

Photodiode as current source

Student Group

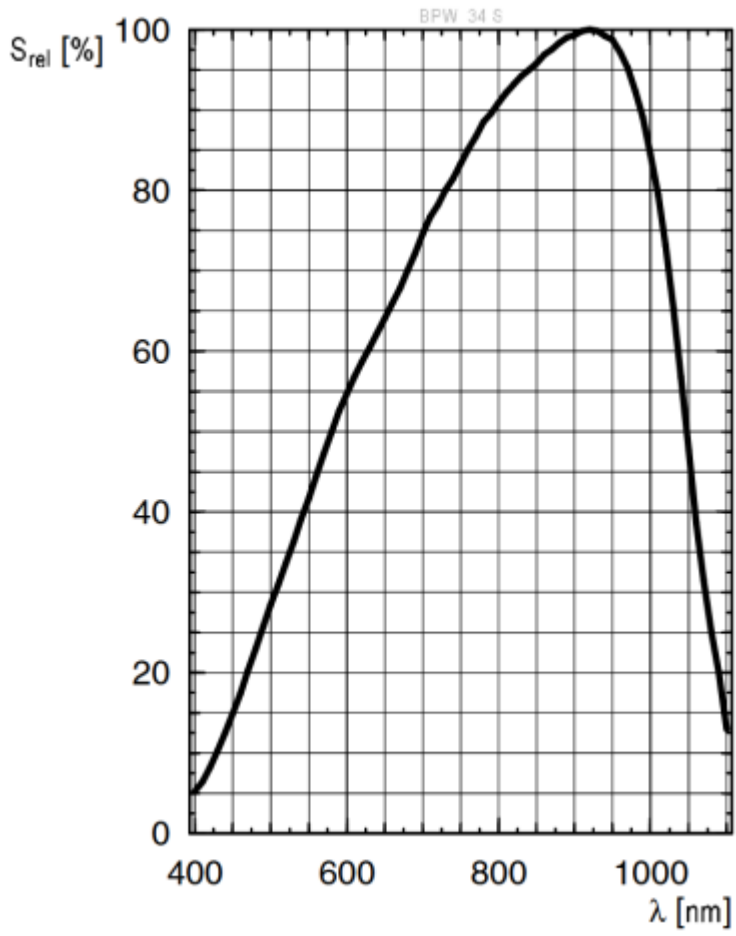
First Name	Surname	Matrikel Nr.

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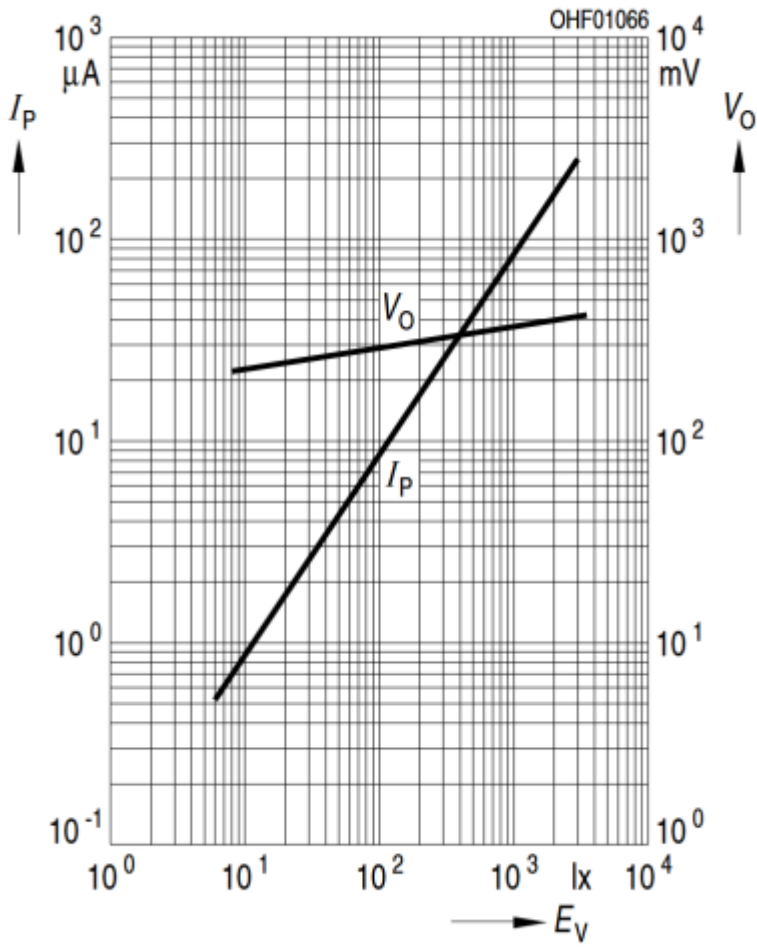
Photo Diode as current source 2
Photo Diode as current source 2

Photo Diode as current source

Photo Diode as current source



$$I_P (V_R = 5 \text{ V}) / V_O = f(E_V)$$



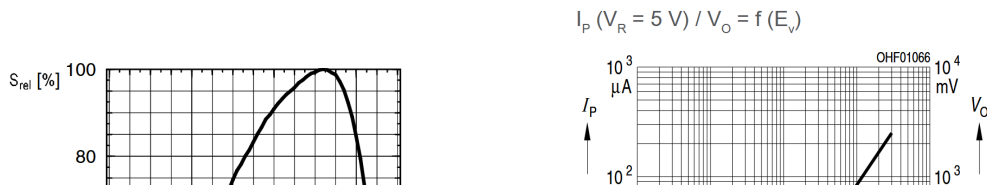


Fig. 3: Inverting Op-Amp: Photo Diode as current source

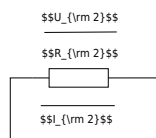


Fig. 4: Inverting Op-Amp: Photo Diode as current source

$$U_{DD} = 10V, U_{SS} = -10V$$

Complete the arrows in the schematic of the circuit.

Take the values for U_1, U_2, U_{OUT} from figure ##.

Use these values to calculate the sum of the voltages at node N_{12} .

Compare your result by measurement.

$$U_1 =$$

$$U_2 =$$

$$U_{OUT} =$$

$$\text{Calculated } U_{12} =$$

$$\text{Measured } U_{12} =$$

What are your results?

{rm}

{rm}

{rm}

What will happen if you short-circuit R_2 ?

Try it and explain your results.

{rm}

{rm}

{rm}

{rm}

{rm}

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$\{\rm \dots\}$

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