

Photodiode as current source

Student Group

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Fig. 1: Inverting Op-Amp: Photo Diode BPW34S

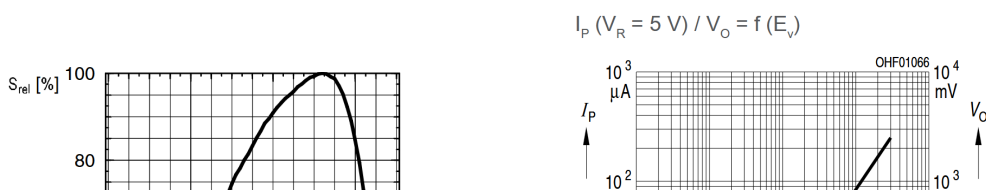


Fig. 2: Inverting Op-Amp: Photo Diode taken from datasheet of BPW34S

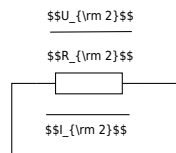


Fig. 3: Inverting Op-Amp: Photo Diode as current source

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

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.

$U_1 =$

$U_2 =$

$U_{OUT} =$

Calculated $N_{12} =$

Measured $N_{12} =$

What are your results?

$\{\rm \dots\}$

$\{\rm \dots\}$

$\{\rm \dots\}$

What will happen if you short-circuit R_2 ?

Try it and explain your results.

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