

# Photodiode as current source

## Student Group

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Fig. 1: Inverting Op-Amp: Photo Diode BPW 34 S

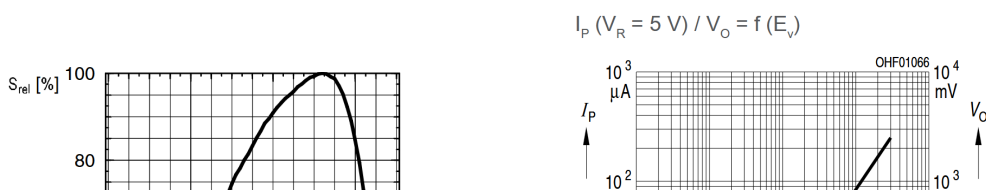


Fig. 2: Inverting Op-Amp: Diagramms of BPW 34 S from datasheet

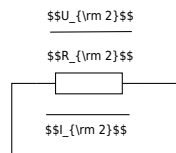


Fig. 3: Inverting Op-Amp: Photo Diode as current source

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

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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