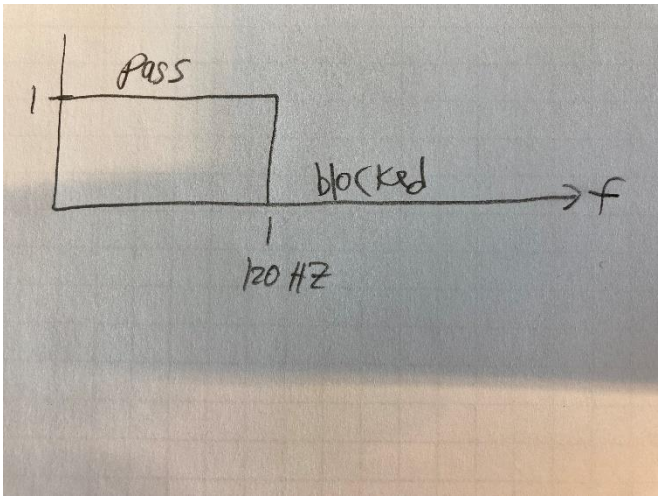
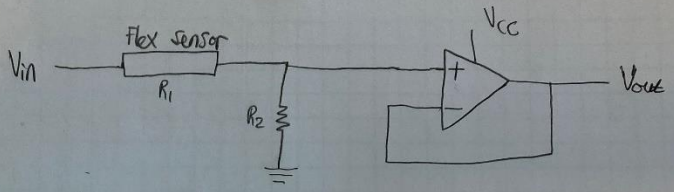


$V_{in} = ?$

$P_{max} = 0.25\ W$

$= \frac{V_o^2}{R_1}$



$V_o = V_{in} \frac{R_1}{R_1 + R_2}$

Flat	$25\ K\Omega$
Low Bend	$45\ K\Omega$
High Bend	$125\ K\Omega$

Flat $R_1 = 25\ K\Omega$	Low Bend $R_2 = 45\ K\Omega$	High Bend $R_3 = 125\ K\Omega$
$0.25 = \frac{V_o^2}{25 \cdot 10^3}$	$0.25 = \frac{V_o^2}{45 \cdot 10^3}$	$0.25 = \frac{V_o^2}{125 \cdot 10^3}$
$6.25 \cdot 10^3 = V_o^2$	$11.25 \cdot 10^3 = V_o^2$	$31.25 \cdot 10^3 = V_o^2$
$V_o = 79\ V$	$V_o = 106\ V$	$V_o = 177\ V$

Choose $R_2 = 10\ K\Omega$:

Flat $R_1 = 25\ K\Omega$	Low Bend $R_2 = 45\ K\Omega$	High Bend $R_3 = 125\ K\Omega$
$79 = V_{in} \frac{25k}{25k + 10k}$	$106 = V_{in} \frac{45k}{45k + 10k}$	$177 = V_{in} \frac{125k}{125k + 10k}$
$V_{in} = 110.6\ V$	$V_{in} = 130\ V$	$V_{in} = 191.16\ V$