

1. What is the short circuit current?

- ☒ The current through the solar cell when the voltage is zero
- ☐ The minimum current through the solar cell
- ☐ The current through the solar cell when the voltage is maximum



Correct

That is correct

2. Do you want high or low values for the series and shunt resistance respectively for optimum solar cell performance?

- ☐ Low shunt and high series
- ☐ Low shunt and low series
- ☒ High shunt and low series
- ☐ High shunt and high series



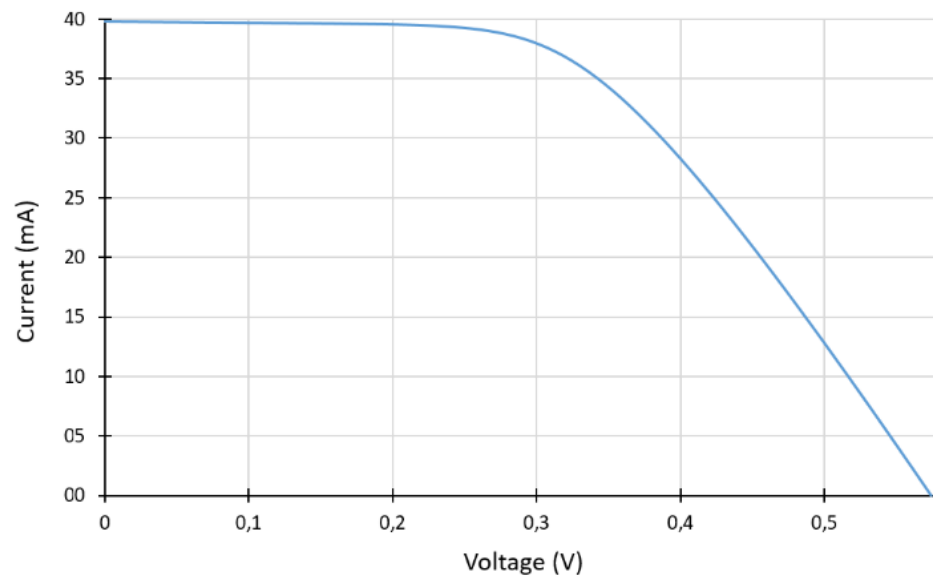
Correct

That is correct

You can read more about parasitic resistances [here](#).

(

3. The following IV curve has been recorded for a solar cell. The short circuit current is 40 mA and the open circuit voltage is 0.7V.

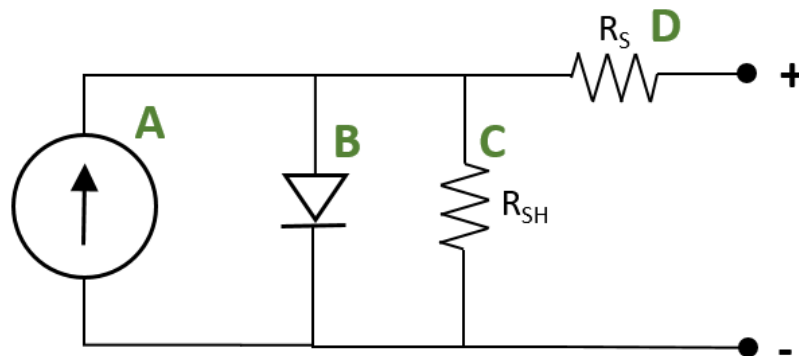


What can we infer about the internal parameters from the IV curve?

Notice that R_S is the series resistance, and R_{SH} is the shunt resistance.

- ☐ High R_S and low R_{SH}
- ☒ High R_S and high R_{SH}
- ☐ Low R_S and high R_{SH}
- ☐ Low R_S and low R_{SH}

4. The equivalent circuit of a non-ideal solar cell is illustrated with each component labeled A, B, C and D respectively.



Consider a solar cell in which energy is dissipated in the metal contacts. Which component (A, B, C or D) would reflect this loss mechanism?

- ☐ A
- ☐ B
- ☐ C
- ☒ D



Correct

That is correct

Take a look at the [Parasitic resistances](#) reading material for more details.