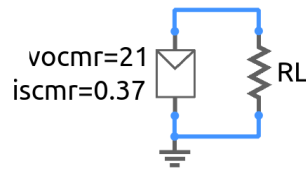


solar_module_1.sqproj



effect of different values of
pmaxr on I-V and P-V curve

The purpose of this example is to understand the working of the PV module model described in [1]. The model takes the open-circuit voltage and short-circuit current (`vocmr` and `iscmr`, respectively) as parameters. The maximum power parameter `pmaxr` is used internally to compute the series resistance of the module such that it gives the required maximum output power.

Exercise Set

1. Run the simulation and plot the I - V curve for the module for two values of `pmaxr`: 4 W and 5 W. Verify from the I - V curve that the open-circuit voltage and short-circuit current are as specified in the circuit file.
2. Plot power versus voltage, and verify that the maximum power is as specified by the `pmaxr` parameter.

References

1. L. Castaner and S. Silvestre, *Modelling Photovoltaic Systems with PSpice*, John Wiley and Sons, 2002.