

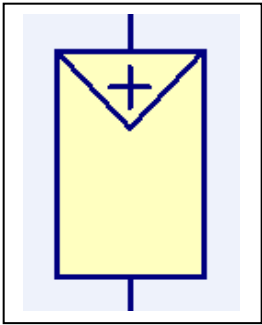
# Device Modeling Report

COMPONENTS: Solar Cell  
PART NUMBER: SX 3190  
MUNUFACTURER: bp Solar  
REMARK:Pmax=190(W)  
REPORT of SolarCells (LTspice IV)



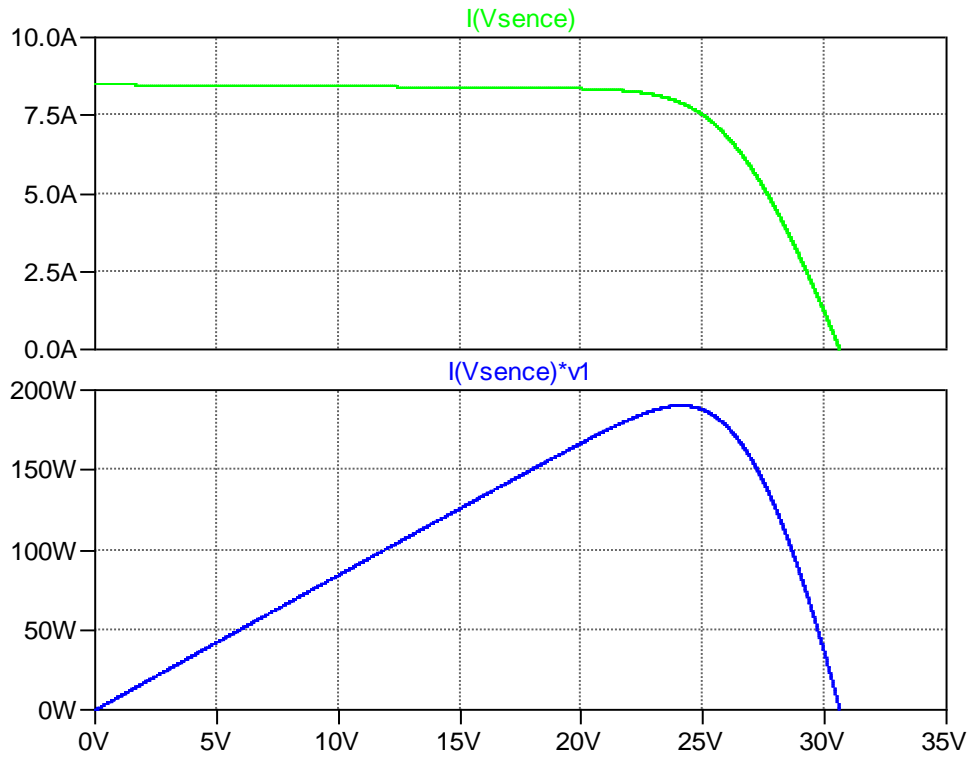
**Bee Technologies Inc.**

# Circuit Configuration

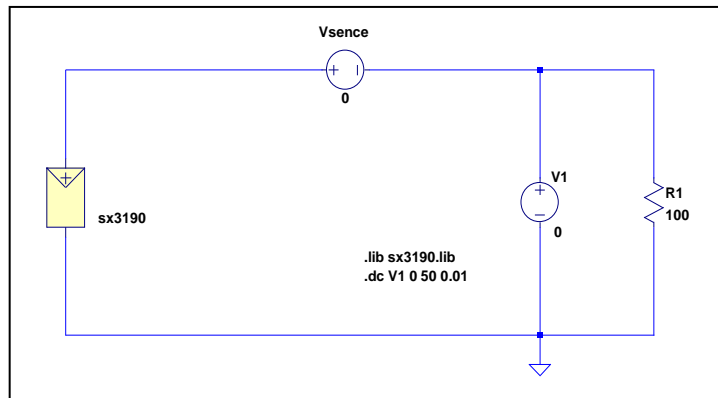


# Output Characteristic

## Circuit Simulation Result



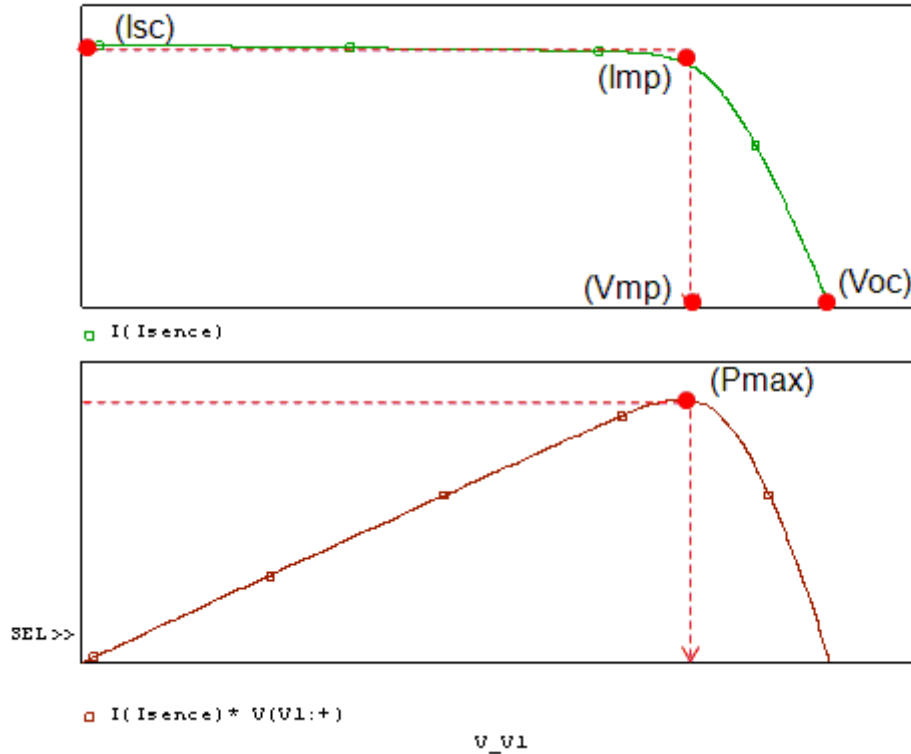
## Simulation Circuit



# Output Characteristic

# Reference

## Circuit Simulation Result



## Data Table

| Symbol        | Measurement | Simulation | %Error |
|---------------|-------------|------------|--------|
| Isc           | 8.5000      | 8.4879     | -0.142 |
| Voc           | 30.6000     | 30.6000    | 0.000  |
| Imp           | 7.8200      | 7.8931     | 0.935  |
| Vmp           | 24.3000     | 24.1000    | -0.823 |
| Pmax(Imp*Vmp) | 190.0260    | 190.2240   | 0.104  |

## Data Information

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|                                         |              |
|-----------------------------------------|--------------|
| <b>No. SX 3190</b>                      |              |
| <b>Maximum power (Pmax)<sup>3</sup></b> | <b>190W</b>  |
| <b>Voltage at Pmax (Vmp)</b>            | <b>24.3V</b> |
| <b>Current at Pmax (Imp)</b>            | <b>7.82A</b> |
| <b>Short-circuit current (Isc)</b>      | <b>8.5A</b>  |
| <b>Open-circuit voltage (Voc)</b>       | <b>30.6V</b> |