

## ORBIT3

### Step-Up DC/DC Converter with Output Power up to 25W without Input/Output Isolation

Generates from the input non-stabilized DC voltage a **stabilized DC output voltage, whose value is higher than the input voltage**. There is no input/output isolation (common input and output ground). Maximum output power up to 25W.

#### Specification:

- possible input voltage range: **+3.5VDC to +36VDC**
- possible output voltage range: **+5VDC to +50VDC**
- maximum output power: up to **25W**  
 (indirectly proportional the the difference between the input and output voltage)
- requested nominal value of the output voltage must be always greater than the maximum value of the input voltage (to maintain the output voltage stability)
- short circuit protection on the output with an external fuse
- efficiency: typically 90%
- built-in input and output filter
- natural convection cooling
- operating ambient temperature range: **-25 °C to +60 °C**
- dimensions: **52.5 x 43.5 x 17.5 mm (2.07" x 1.71" x 0.69")**
- through-hole open-frame design for placing on a PCB

#### Application:

Step-Up (boost) converter is designed for creating of the positive DC output voltage from the lower positive DC input voltage. For example there is possible to generate output +12VDC from input 5VDC. Other examples of the possible use are +6VDC to +12VDC, +12VDC to +24VDC, +12VDC to +48VDC, +24VDC to +48VDC and so on. Another application is **extending of the input voltage range of any standard DC/DC converter**. For example by connection of this Step-Up converter in front of any DC/DC converter with the input voltage range from 18VDC to 36VDC the resulting input voltage range can be from 9VDC to 36VDC, for instance.

#### Drawing:

**Bottom view (all dimensions in mm)**

