

Unregulated  
 Single output  
 Case style: SIP 4

# INDUSTRIAL DC/DC Converters SHORT CIRCUIT PROOF

1 Watt / 1,5 Watt  
 Series: FS4U

**Electrical specifications:**

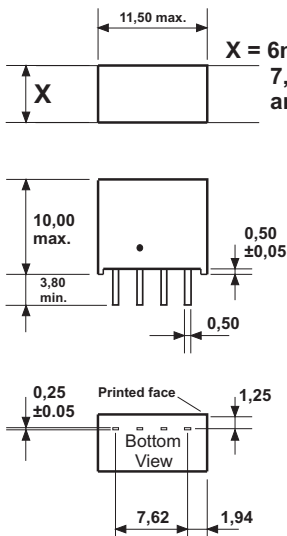
|                          |                                  |  |                           |
|--------------------------|----------------------------------|--|---------------------------|
| Input voltage range:     | +/- 10%                          | Efficiency:  | min. 65%                  |
| Output voltage accuracy: | +/- 2% (Vin=nominal & full load) | Output Ripple & Noise:                                 | typ. 150mVp-p             |
|                          | +/- 5% (Vin < 3,3V)              | Short circuit protection:                              | continuous                |
| Line Vin/Vout:           | +/- 1% / +/- 1%                  | Insulation test voltage:                               | 1500V AC rms @ 1W Version |
| Output voltage change:   | 3,3V,5V output types 15% max.    | Output voltage: @ zero Load; approx. 15% above nominal |                           |
| (10% to 100%)            | 9 ~ 24V output types 10% max.    | Part-No.: /2   | 0,25W output power        |
| Ambient temperature:     | -40°C up to 71°C                 | Part-No.: /5   | 0,5W output power         |
| Operating temperature:   | max. +95°C                       |  |                           |

**CAUTION: NO INPUT POLARITY CHANGE ALLOWED!**

| Part - No.<br>DC                                 | Input Voltage<br>DC | Output Voltage<br>DC | 1Watt                | 1,5Watt              |
|--|---------------------|----------------------|----------------------|----------------------|
|  |                     |                      | Output current<br>mA | Output current<br>mA |
| FS4U-0505<br>FS4U-0509<br>FS4U-0512<br>FS4U-0515 | 5V                  | 5V                   | 200mA                | 300mA                |
|  |                     | 9V                   | 110mA                |                      |
|  |                     | 12V                  | 83mA                 |                      |
|  |                     | 15V                  | 66mA                 |                      |
| FS4U-1205<br>FS4U-1209<br>FS4U-1212<br>FS4U-1215 | 12V                 | 5V                   | 200mA                | 300mA                |
|  |                     | 9V                   | 110mA                |                      |
|  |                     | 12V                  | 83mA                 |                      |
|  |                     | 15V                  | 66mA                 |                      |
| FS4U-1505<br>FS4U-1509<br>FS4U-1512<br>FS4U-1515 | 15V                 | 5V                   | 200mA                | 300mA                |
|  |                     | 9V                   | 110mA                |                      |
|  |                     | 12V                  | 83mA                 |                      |
|  |                     | 15V                  | 66mA                 |                      |
| FS4U-2405<br>FS4U-2409<br>FS4U-2412<br>FS4U-2415 | 24V                 | 5V                   | 200mA                |                      |
|  |                     | 9V                   | 110mA                |                      |
|  |                     | 12V                  | 83mA                 |                      |
|  |                     | 15V                  | 66mA                 |                      |

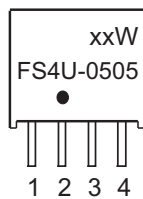
**Any other input & output voltages available**

(for example 3,3V)



X = 6mm @ 1Watt  
 7,5mm@Uin 24V  
 and 1,5Watt

**PIN CONNECTION:**



- 1 = GND
- 2 = Vcc
- 3 = 0V
- 4 = +Vout

ALL DIMENSIONS IN MM  
 MILLIMETERS +/-0,25mm  
 All pins on a 2,54mm pitch  
 Dot denotes +IN

Additional output capacitor  
 of 4,7µF will reduce ripple  
 significantly, but is not demanded.

**Input capacitor 4,7µF - 10µF is a must.**

Specification may be changed without notice  
 please contact office for verification

We can offer EMC - Filter  
 according to EN55011/22 Class B.