

**Unregulated  
Single Output  
SMD Case: SO14 package**

## COMMERCIAL DC/DC Converters

**1 Watt / 2 Watt  
Series: SD14**

### Electrical specifications:

Input Voltage Range:  $\pm 10\%$   
Input Filter: capacitor  
Output Voltage Accuracy:  $\pm 5\%$  \*\*  
Line Voltage Regulation:  $\pm 1,2\% / 1\%$  of  $V_{in}$  max.  
Load Voltage Regulation: 1,8V, 3,3V output Types 20% max.  
(10% to 100% full load) 5V output Type 15% max.  
9V ~ 24V output Types 10% max.  
Reflow Temperature: 245°C (30 sec) max.

\*\* Note: Measured @25°C with the condition  
of  $V_{in}$  = nominal and full load

Ripple/Noise @20MHz BW: max. 100mVp-p (1W)  
max. 150mVp-p (2W)  
Efficiency at Full Load: min. 70%  
Isolation Voltage: min. 1000V DC  
Optional Part-No.: /H2 min. 2000V DC  
Optional Part-No.: /H3 min. 3000V DC  
Short Circuit Protection: 1.0 second  
continuous  
Optional Part-No.: /S  
Operating Temp. Range: -40°C to +100°C (1W)  
-40°C to +85°C (2W)  
Storage Temp. Range: -55°C to +125°C

Part-No.: /2 0,25W  
Part-No.: /5 0,5W  
with marking /X denotes with eight pins

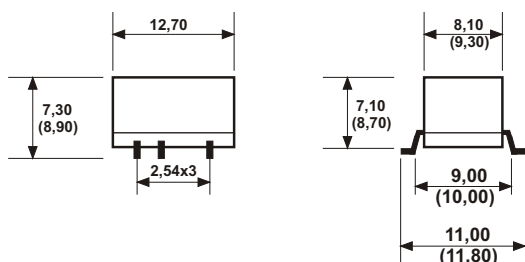
**CAUTION: NO INPUT POLARITY CHANGE ALLOWED!**

|                |                            |                      |                     | 1 Watt |                |                     |                      |                     | 2 Watt |
|----------------|----------------------------|----------------------|---------------------|--------|----------------|---------------------|----------------------|---------------------|--------|
| Part-No.       | Input Voltage (VDC)        | Output Voltage (VDC) | Output Current (mA) |        | Part-No.       | Input Voltage (VDC) | Output Voltage (VDC) | Output Current (mA) |        |
| SD14-xx01,8 1W | 1,8, 3,3, 5, 9, 12, 15, 24 | 1,8                  | 555                 |        | SD14-xx03,3 2W | 5, 9, 12, 15, 24    | 3,3                  | 606                 |        |
| SD14-xx03,3 1W | 1,8, 3,3, 5, 9, 12, 15, 24 | 3,3                  | 303                 |        | SD14-xx05 2W   | 5, 9, 12, 15, 24    | 5                    | 400                 |        |
| SD14-xx05 1W   | 1,8, 3,3, 5, 9, 12, 15, 24 | 5                    | 200                 |        | SD14-xx09 2W   | 5, 9, 12, 15, 24    | 9                    | 222                 |        |
| SD14-xx09 1W   | 1,8, 3,3, 5, 9, 12, 15, 24 | 9                    | 110                 |        | SD14-xx12 2W   | 5, 9, 12, 15, 24    | 12                   | 166                 |        |
| SD14-xx12 1W   | 1,8, 3,3, 5, 9, 12, 15, 24 | 12                   | 84                  |        | SD14-xx15 2W   | 5, 9, 12, 15, 24    | 15                   | 132                 |        |
| SD14-xx15 1W   | 1,8, 3,3, 5, 9, 12, 15, 24 | 15                   | 66                  |        | SD14-xx24 2W   | 5, 9, 12, 15, 24    | 24                   | 83                  |        |
| SD14-xx24 1W   | 1,8, 3,3, 5, 9, 12, 15, 24 | 24                   | 42                  |        |                |                     |                      |                     |        |

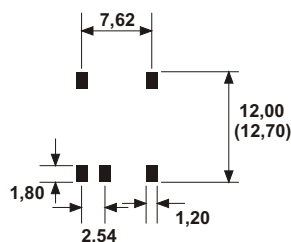
The input voltage can be increased by the value of the selected output voltage in boost operation (see Application Note C43, page 149).

**Any other input or output voltages available**

### Mechanical Specifications:

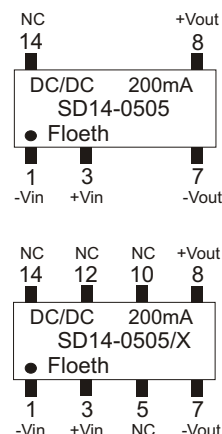


### Footprint:



ALL DIMENSIONS IN MM  
(x.yy) 2Watt Type  
Tolerance  $\pm 0,25$ mm  
All pins on a 2,54mm pitch.  
Dot marks Pin 1

### PIN CONNECTION:



Specification may be changed without notice  
please contact office for verification

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