

# DC-DC Converters

**POWER  
SOLVE**

## THN15 Series, 15 Watt

[www.powersolve.co.uk](http://www.powersolve.co.uk)

### Features

- Smallest Encapsulated 15W Converter
- 25.4 x 25.4 x 10mm Metal Package
- Wide 2:1 Input Range
- Very High Efficiency up to 87%
- Adjustable Output Voltage & Remote On/Off
- Short Circuit Protection



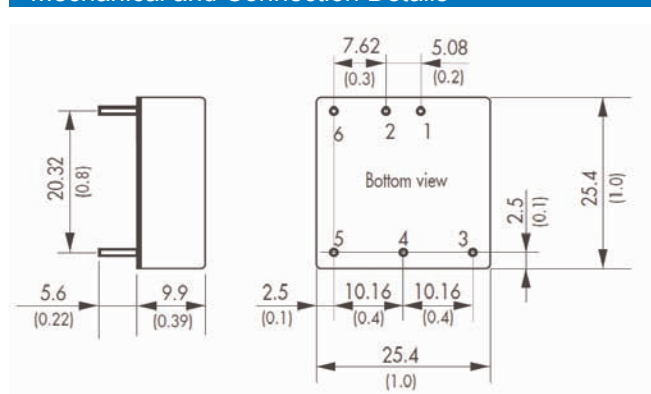
### Electrical Specification

|                             |                                                                   |
|-----------------------------|-------------------------------------------------------------------|
| Output Voltage Adjustment   | ±10% by external resistor                                         |
| Conducted EMI               | EN 55022 class A, FCC level A (with external capacitor)           |
| Short Circuit Protection    | continuous, automatic recovery                                    |
| Operating Temperature Range | -40°C to +85°C (derate at 2.5%/°C above 65°C)                     |
| I/O Isolation test voltage  | 1500VDC                                                           |
| Safety Approvals            | cUL/UL 60950-1, IEC/EN 60950-1, CB report                         |
| Casing                      | metal 6-side shielded with insulated baseplate                    |
| Remote On/Off               | shutdown input for low input current (2.5mA) in standby operation |

### Output Voltage and Current Ratings

| MODEL       | INPUT V  | OUTPUT V | OUTPUT I | RIPPLE & NOISE   | LINE REG. | LOAD REG. | EFF. |
|-------------|----------|----------|----------|------------------|-----------|-----------|------|
| THN 15-1210 | 9 - 18V  | 3.3VDC   | 4000mA   | 100mV pk-pk max. | 0.2%      | 0.5%      | 84%  |
| THN 15-1211 |          | 5VDC     | 3000mA   | 100mV pk-pk max. | 0.2%      | 0.5%      | 86%  |
| THN 15-1212 |          | 12VDC    | 1300mA   | 100mV pk-pk max. | 0.2%      | 0.5%      | 85%  |
| THN 15-1213 |          | 15VDC    | 1000mA   | 100mV pk-pk max. | 0.2%      | 0.5%      | 87%  |
| THN 15-1221 |          | ±5VDC    | ±1500mA  | 100mV pk-pk max. | 0.2%      | 1.0%      | 85%  |
| THN 15-1222 |          | ±12VDC   | ±625mA   | 100mV pk-pk max. | 0.2%      | 1.0%      | 87%  |
| THN 15-1223 | 18 - 36V | ±15VDC   | ±500mA   | 100mV pk-pk max. | 0.2%      | 1.0%      | 88%  |
| THN 15-2410 |          | 3.3VDC   | 4000mA   | 100mV pk-pk max. | 0.2%      | 0.5%      | 86%  |
| THN 15-2411 |          | 5VDC     | 3000mA   | 100mV pk-pk max. | 0.2%      | 0.5%      | 86%  |
| THN 15-2412 |          | 12VDC    | 1300mA   | 100mV pk-pk max. | 0.2%      | 0.5%      | 87%  |
| THN 15-2413 |          | 15VDC    | 1000mA   | 100mV pk-pk max. | 0.2%      | 0.5%      | 88%  |
| THN 15-2421 |          | ±5VDC    | ±1500mA  | 100mV pk-pk max. | 0.2%      | 1.0%      | 85%  |
| THN 15-2422 | 36 - 75V | ±12VDC   | ±625mA   | 100mV pk-pk max. | 0.2%      | 1.0%      | 88%  |
| THN 15-2423 |          | ±15VDC   | ±500mA   | 100mV pk-pk max. | 0.2%      | 1.0%      | 88%  |
| THN 15-4810 |          | 3.3VDC   | 4000mA   | 100mV pk-pk max. | 0.2%      | 0.5%      | 86%  |
| THN 15-4811 |          | 5VDC     | 3000mA   | 100mV pk-pk max. | 0.2%      | 0.5%      | 88%  |
| THN 15-4812 |          | 12VDC    | 1300mA   | 100mV pk-pk max. | 0.2%      | 0.5%      | 88%  |
| THN 15-4813 |          | 15VDC    | 1000mA   | 100mV pk-pk max. | 0.2%      | 0.5%      | 88%  |
| THN 15-4821 |          | ±5VDC    | ±1500mA  | 100mV pk-pk max. | 0.2%      | 1.0%      | 85%  |
| THN 15-4822 |          | ±12VDC   | ±625mA   | 100mV pk-pk max. | 0.2%      | 1.0%      | 89%  |
| THN 15-4823 |          | ±15VDC   | ±500mA   | 100mV pk-pk max. | 0.2%      | 1.0%      | 88%  |

### Mechanical and Connection Details



| Pin | Single Output | Dual Output   |
|-----|---------------|---------------|
| 1   | +Vin (Vcc)    | +Vin (Vcc)    |
| 2   | -Vin (GND)    | -Vin (GND)    |
| 3   | +Vout         | +Vout         |
| 4   | Trim          | Common        |
| 5   | -Vout         | -Vout         |
| 6   | Remote On/Off | Remote On/Off |