

DC-DC Converters

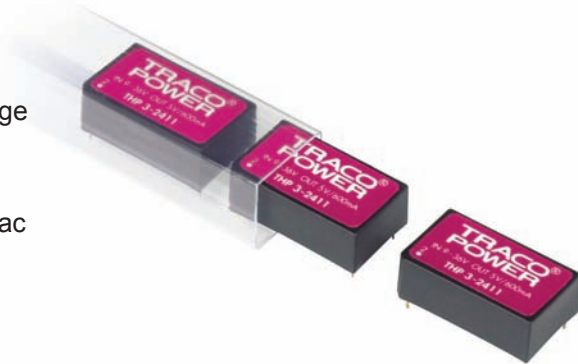
**POWER
SOLVE**

THP3 Series, 3 Watt

www.powersolve.co.uk

Features

- Ultra wide 4:1 input voltage range in a DIP-24 package
- Input voltages up to 160VDC
- I/O isolation voltage 4000Vac rms
- Reinforced insulation rated for working voltage 300Vac
- Industrial and medical safety approvals
- Operating temperature range -40°C to +85°C
- Short circuit protection
- Input filter to meet EN55022 class A



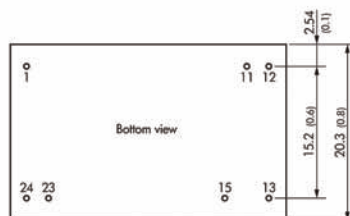
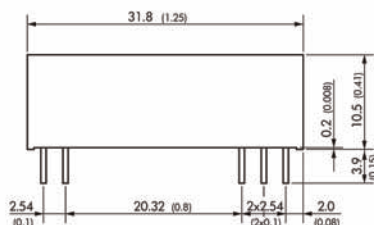
Electrical Specification

Conducted EMI	EN55022 class A (internal filter)
Short Circuit Protection	continuous, automatic recovery
Operating Temperature Range	-40°C to +85°C (derate at 3.3%/°C above 70°C)
I/O Isolation voltage	4000Vac rms, rated for 300Vac working
I/O Isolation test voltage	6000V pk (1sec)
Safety Approvals	cUL/UL 60950-1, IEC/EN 60950-1, UL 60601-1, IEC/EN 60601-1, CB report
Casing	plastic (UL94V-0 rated)

Output Voltage and Current Ratings

MODEL	INPUT VOLTAGE	OUTPUT VOLTAGE	OUTPUT CURRENT	RIPPLE & NOISE	LINE REG.	LOAD REG.	EFF.
THP 3-2411	9 - 40V	5VDC	600mA	150mV pk-pk max.	0.5%	1.0%	78%
THP 3-2412		12VDC	250mA	150mV pk-pk max.	0.5%	1.0%	83%
THP 3-2422		±12VDC	±125mA	150mV pk-pk max.	0.5%	1.0%	83%
THP 3-2423		±15VDC	±100mA	150mV pk-pk max.	0.5%	1.0%	83%
THP 3-4811	18 - 80V	5VDC	600mA	150mV pk-pk max.	0.5%	1.0%	78%
THP 3-4812		12VDC	250mA	150mV pk-pk max.	0.5%	1.0%	83%
THP 3-4822		±12VDC	±125mA	150mV pk-pk max.	0.5%	1.0%	83%
THP 3-4823		±15VDC	±100mA	150mV pk-pk max.	0.5%	1.0%	83%
THP 3-7211	36 - 160V	5VDC	600mA	150mV pk-pk max.	0.5%	1.0%	78%
THP 3-7212		12VDC	250mA	150mV pk-pk max.	0.5%	1.0%	83%
THP 3-7222		±12VDC	±125mA	150mV pk-pk max.	0.5%	1.0%	83%
THP 3-7223		±15VDC	±100mA	150mV pk-pk max.	0.5%	1.0%	83%

Mechanical and Connection Details



Pin	Single Output	Dual Output
1	+Vin (Vcc)	+Vin (Vcc)
11	No pin	Common
12	-Vout	No Pin
13	+Vout	-Vout
15	No pin	+Vout
23	-Vin (GND)	-Vin (GND)
24	-Vin (GND)	-Vin (GND)

Dimensions in [mm], () = Inch
Pin diameter $\varnothing 0.6 \pm 0.05$ [0.024 ± 0.002]
Tolerances ± 0.5 [± 0.02]
Pin pitch tolerances ± 0.2 [± 0.01]