

DC-DC Converters

**POWER
SOLVE**

THB 3 Series, 3 Watt

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Features

- DIP 24 package
- Wide 2:1 input voltage range
- Industrial and medical safety approval
- Short circuit protection
- Input filter to meet EN 55022 class A
- Reinforced insulation rated for working voltage up to 300VAC



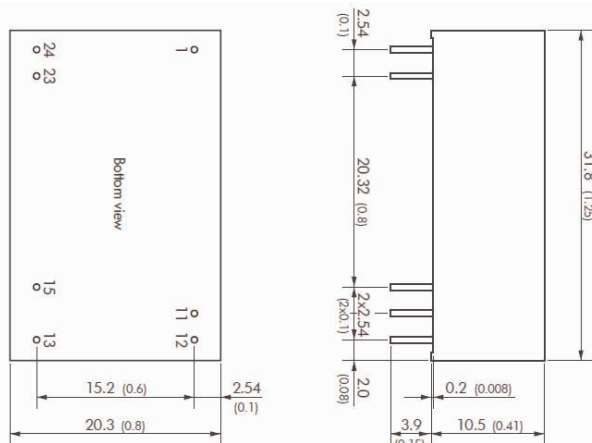
Electrical Specification

Conducted EMI	EN 55022 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 voltage
I/O Isolation test voltage	6000Vpk (1 sec.)
Safety Approvals	cUL/UL 60950-1, IEC/EN 60950-1, cUL/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.	EFFICIENCY
THB3-0511	4.5 - 9V	5VDC	600mA	100mV pk-pk max.	0.5%	1.0%	70%
THB3-0512		12VDC	250mA	150mV pk-pk max.	0.5%	1.0%	75%
THB3-0515		24VDC	125mA	150mV pk-pk max.	0.5%	1.0%	76%
THB3-0522		±12VDC	±125mA	150mV pk-pk max.	0.5%	2.0%	75%
THB3-0523		±15VDC	±100mA	150mV pk-pk max.	0.5%	2.0%	75%
THB3-1211	9 - 18V	5VDC	600mA	100mV pk-pk max.	0.5%	1.0%	74%
THB3-1212		12VDC	250mA	150mV pk-pk max.	0.5%	1.0%	80%
THB3-1215		24VDC	125mA	150mV pk-pk max.	0.5%	1.0%	81%
THB3-1222		±12VDC	±125mA	150mV pk-pk max.	0.5%	2.0%	80%
THB3-1223		±15VDC	±100mA	150mV pk-pk max.	0.5%	2.0%	80%
THB3-2411	18 - 36V	5VDC	600mA	100mV pk-pk max.	0.5%	1.0%	78%
THB3-2412		12VDC	250mA	150mV pk-pk max.	0.5%	1.0%	83%
THB3-2415		24VDC	125mA	150mV pk-pk max.	0.5%	1.0%	84%
THB3-2422		±12VDC	±125mA	150mV pk-pk max.	0.5%	2.0%	83%
THB3-2423		±15VDC	±100mA	150mV pk-pk max.	0.5%	2.0%	83%
THB3-4811	36 - 75V	5VDC	600mA	100mV pk-pk max.	0.5%	1.0%	78%
THB3-4812		12VDC	250mA	150mV pk-pk max.	0.5%	1.0%	83%
THB3-4815		24VDC	125mA	150mV pk-pk max.	0.5%	1.0%	84%
THB3-4822		±12VDC	±125mA	150mV pk-pk max.	0.5%	2.0%	83%
THB3-4823		±15VDC	±100mA	150mV pk-pk max.	0.5%	2.0%	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)