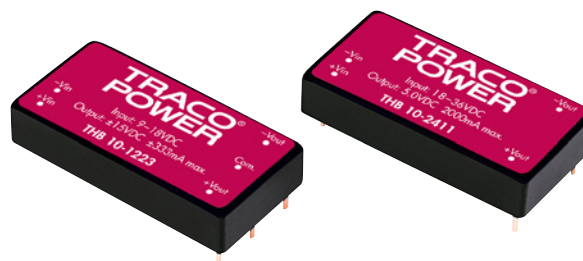


Features

- ◆ Supplementary and reinforced insulation
- ◆ I/O isolation 4000 VACrms rated for 300 Vrms working voltage
- ◆ 2 x MOOP Medical safety according to AAMI/ANSI ES 60601-1:2005(R) and IEC/EN 60601-1 3rd edition
- ◆ Industrial safety to UL/IEC/EN 60950-1
- ◆ Wide 2:1 input voltage ranges
- ◆ Extended operating temperature range -40°C to 75°C max.
- ◆ Input filter meets EN55022, class A
- ◆ Continuous short-circuit protection
- ◆ High reliability
- ◆ 3-year product warranty



The THB 10 series is a range of high performance DC/DC converter modules with double reinforced insulation system. It complies to latest medical safety standard IEC 60950-1 3rd edition for MOOP (Means of Operator Protection). The product comes in a 2"x1" industry standard package. All 12 models features wide 2:1 input voltage range and fully regulated output voltage. The converters offer an economical solution for demanding applications in industrial and medical instrumentation.

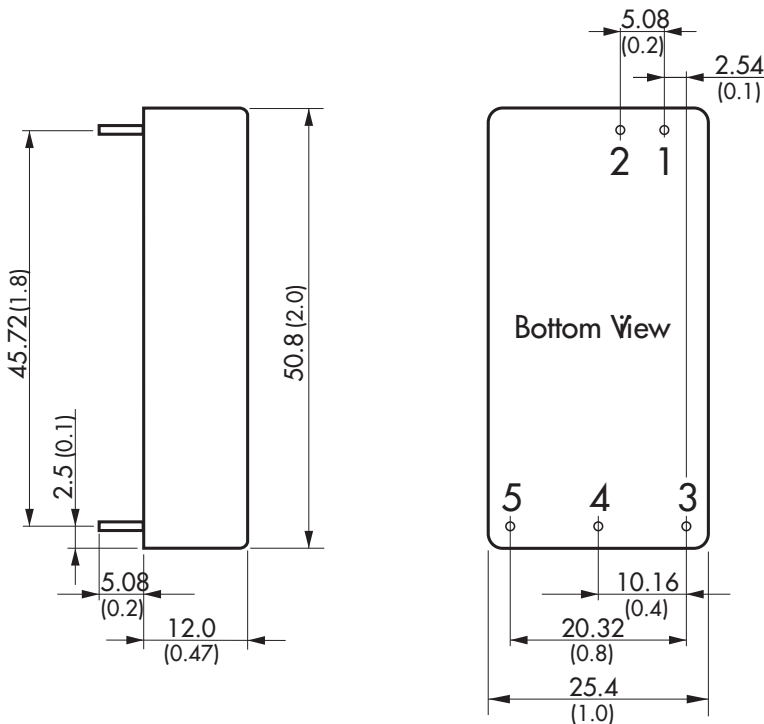
Models

Order code	Input voltage range	Output voltage	Output current max.	Efficiency typ.
THB 10-1211	9 - 18 VDC (12 VDC nominal)	5.1 VDC	1600 mA	75 %
THB 10-1212		12.0 VDC	835 mA	80 %
THB 10-1222		±12.0 VDC	±417 mA	80 %
THB 10-1223		±15.0 VDC	±333 mA	81 %
THB 10-2411	18 - 36 VDC (24 VDC nominal)	5.1 VDC	2000 mA	76 %
THB 10-2412		12.0 VDC	835 mA	81 %
THB 10-2422		±12.0 VDC	±417 mA	81 %
THB 10-2423		±15.0 VDC	±333 mA	82 %
THB 10-4811	36 - 75 VDC (48 VDC nominal)	5.1 VDC	2000 mA	76 %
THB 10-4812		12.0 VDC	835 mA	81 %
THB 10-4822		±12.0 VDC	±417 mA	81 %
THB 10-4823		±15.0 VDC	±333 mA	82 %

General Specifications

Temperature ranges	- Operating - Case - Storage	-40°C to +75°C +95°C max. -50°C to +125°C
Derating		2.5 %/K above 55°C
Humidity (non condensing)		95 % rel H max.
Altitude during operation		4000 m
Temperature coefficient		±0.02 %/K typ.
Reliability, calculated MTBF (MIL-HDBK-217F at +25°C, ground benign)		>1'000'000 h
Switching frequency		150 kHz typ. (puls width modulation)
Casing material		non conductive plastic (UL 94V-0-rated)
Pin Material		copper alloy with gold plate over nickel subplate
Weight		24.5 g (0.86 oz)
Soldering temperature		max. 260°C / 10 sec.

Outline Dimensions



Pin-Out		
Pin	Single	Dual
1	+Vin (Vcc)	+Vin (Vcc)
2	-Vin(GND)	-Vin(GND)
3	+Vout	+Vout
4	No pin	Common
5	-Vout	-Vout

Dimensions in [mm], () = Inch
 Pin diameter \varnothing 1.0 \pm 0.05 (0.04 \pm 0.002)
 Tolerances \pm 0.25 (\pm 0.01)
 Pin pitch tolerances \pm 0.13 (\pm 0.005)

Specifications can be changed without notice! Make sure you are using the latest documentation, downloadable at www.tracopower.com