

DC-DC Converters

**POWER
SOLVE**

THD10 Series, 10 Watt

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Features

- High power density in a DIP-24 metal package
- Wide 2:1 input range
- High efficiency up to 87%
- I/O isolation 1500VDC
- Operating temperature range -40°C to +75°C
- Short circuit protection
- Input filter to meet EN55022 class A
- Industry standard pin out



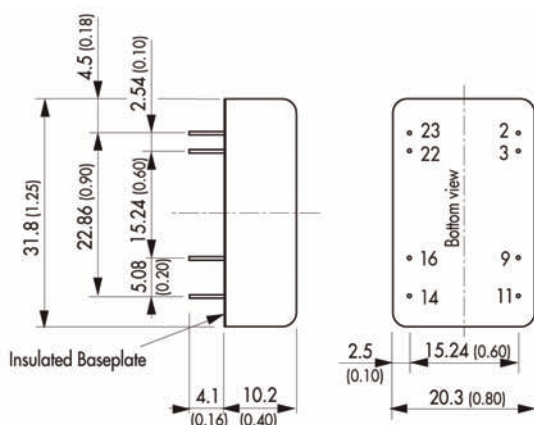
Electrical Specification

Conducted EMI	EN55022 class A & FCC level A (internal filter)
Short Circuit Protection	continuous, automatic recovery
Operating Temperature Range	-40°C to +75°C (derate at 3.0%/°C above 50°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

Output Voltage and Current Ratings

MODEL	INPUT VOLTAGE	OUTPUT VOLTAGE	OUTPUT CURRENT	RIPPLE & NOISE	LINE REG.	LOAD REG.	EFF.
THD10-1210	9 - 18V	3.3VDC	3000mA	85mV pk-pk max.	1.0%	1.2%	82%
THD10-1211		5.1VDC	2000mA	85mV pk-pk max.	1.0%	1.2%	83%
THD10-1212		12VDC	830mA	85mV pk-pk max.	1.0%	1.2%	87%
THD10-1222		±12VDC	±415mA	85mV pk-pk max.	1.0%	1.2%	87%
THD10-1223		±15VDC	±330mA	85mV pk-pk max.	1.0%	1.2%	86%
THD10-2409	18 - 36V	2.5VDC	3000mA	85mV pk-pk max.	1.0%	1.2%	83%
THD10-2410		3.3VDC	3000mA	85mV pk-pk max.	1.0%	1.2%	85%
THD10-2411		5.1VDC	2000mA	85mV pk-pk max.	1.0%	1.2%	87%
THD10-2412		12VDC	830mA	85mV pk-pk max.	1.0%	1.2%	87%
THD10-2422		±12VDC	±415mA	85mV pk-pk max.	1.0%	1.2%	88%
THD10-2423	36 - 75V	±15VDC	±330mA	85mV pk-pk max.	1.0%	1.2%	87%
THD10-4809		2.5VDC	3000mA	85mV pk-pk max.	1.0%	1.2%	83%
THD10-4810		3.3VDC	3000mA	85mV pk-pk max.	1.0%	1.2%	85%
THD10-4811		5.1VDC	2000mA	85mV pk-pk max.	1.0%	1.2%	87%
THD10-4812		12VDC	830mA	85mV pk-pk max.	1.0%	1.2%	87%
THD10-4822		±12VDC	±415mA	85mV pk-pk max.	1.0%	1.2%	88%
THD10-4823		±15VDC	±330mA	85mV pk-pk max.	1.0%	1.2%	87%

Mechanical and Connection Details



Pin	Single Output	Dual Output
2	-Vin (GND)	-Vin (GND)
3	-Vin (GND)	-Vin (GND)
9	No Pin	Common
11	No Conn.	-Vout
14	+Vout	+Vout
16	-Vout	Common
22	+Vin (Vcc)	+Vin (Vcc)
23	+Vin (Vcc)	+Vin (Vcc)

Dimensions in [mm], () = Inch
Pin diameter $\varnothing 0.5 \pm 0.05$ (0.02 ± 0.002)
Tolerances ± 0.5 (± 0.02)
Pin pitch tolerances ± 0.35 (± 0.014)