

DC-DC Converters

**POWER
SOLVE**

THN20 Series, 20 Watt

www.powersolve.co.uk

Features

- Smallest Encapsulated 20W Converter
- 25.4 x 25.4 x 10mm Metal Package
- Wide 2:1 Input Range
- Very High Efficiency up to 90%
- Adjustable Output Voltage & Remote On/Off
- Short Circuit Protection



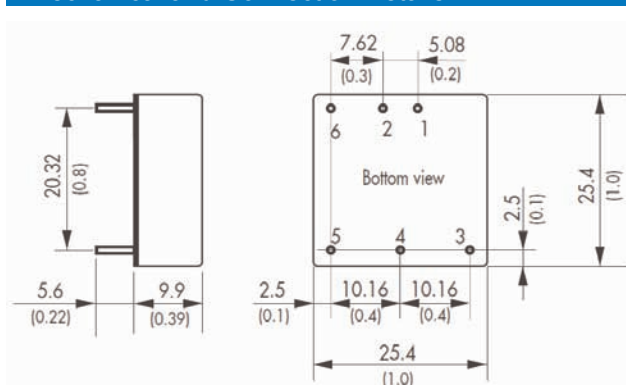
Electrical Specification

Output Voltage Adjustment	±10% by external resistor
Conducted EMI	EN 55022 class A, FCC part 15 level A (without external components)
Short Circuit Protection	continuous, automatic recovery
Operating Temperature Range	-40°C to +85°C (derate at 2.0%/°C above 60°C) with optional heatsink
I/O Isolation test voltage	1500VDC
Safety Approvals	cUL/UL 60950-1, IEC/EN 60950-1
Casing	nickel coated copper with non conductive FR4 baseplate
Remote On/Off	shutdown input for low input current (1.5mA) in standby operation On: 3 - 15VDC or open circuit, Off: 0 - 1.2VDC or short circuit

Output Voltage and Current Ratings

MODEL	INPUT V	OUTPUT V	OUTPUT I	RIPPLE & NOISE	LINE REG.	LOAD REG.	EFF.
THN20-1210	9 - 18V (12V nom.)	3.3VDC	4500mA	75mV pk-pk max.	0.2%	0.2%	86%
THN20-1211		5VDC	4000mA	75mV pk-pk max.	0.2%	0.2%	90%
THN20-1212		12VDC	1670mA	100mV pk-pk max.	0.2%	0.2%	89%
THN20-1213		15VDC	1330mA	100mV pk-pk max.	0.2%	0.2%	89%
THN20-1222		±12VDC	±833mA	100mV pk-pk max.	0.5%	1.0%	89%
THN20-1223	18 - 36V (24V nom.)	±15VDC	±667mA	100mV pk-pk max.	0.5%	1.0%	89%
THN20-2410		3.3VDC	4500mA	75mV pk-pk max.	0.2%	0.2%	86%
THN20-2411		5VDC	4000mA	75mV pk-pk max.	0.2%	0.2%	90%
THN20-2412		12VDC	1670mA	100mV pk-pk max.	0.2%	0.2%	90%
THN20-2413		15VDC	1330mA	100mV pk-pk max.	0.2%	0.2%	90%
THN20-2422	36 - 75V (48V nom.)	±12VDC	±833mA	100mV pk-pk max.	0.5%	1.0%	90%
THN20-2423		±15VDC	±667mA	100mV pk-pk max.	0.5%	1.0%	90%
THN20-4810		3.3VDC	4500mA	75mV pk-pk max.	0.2%	0.2%	86%
THN20-4811		5VDC	4000mA	75mV pk-pk max.	0.2%	0.2%	90%
THN20-4812		12VDC	1670mA	100mV pk-pk max.	0.2%	0.2%	90%
THN20-4813		15VDC	1330mA	100mV pk-pk max.	0.2%	0.2%	90%
THN20-4822		±12VDC	±833mA	100mV pk-pk max.	0.5%	1.0%	90%
THN20-4823		±15VDC	±667mA	100mV pk-pk max.	0.5%	1.0%	90%

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

Heatsink option:

THN-HS1

Heatsink supplied fitted to converter. Contact sales for details.

