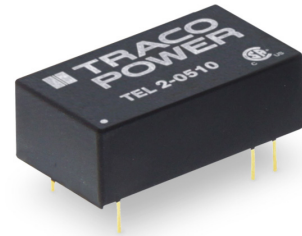


### Features

- ◆ Ultracompact DIP-16 plastic package
- ◆ Wide 2:1 input range
- ◆ Regulated output
- ◆ I/O isolation 1500V
- ◆ Input filter meets EN55032, class A without ext. components
- ◆ Low ripple and noise
- ◆ Indefinite shortcircuit protection
- ◆ Operating temperature range -40°C to +80°C
- ◆ Lead free design, RoHS compliant
- ◆ 3-year product warranty



The TEL-2 series, comprising 28 models, is a range of isolated 2 Watt converters in a low profile DIP-16 package. Requiring only 3.25 cm<sup>2</sup> of space on the PCB they provide a complete DC/DC converter without need of any external components. Wide input range and tightly regulated output voltage qualifies these converters for many cost critical applications in industrial and consumer electronics.

### Models

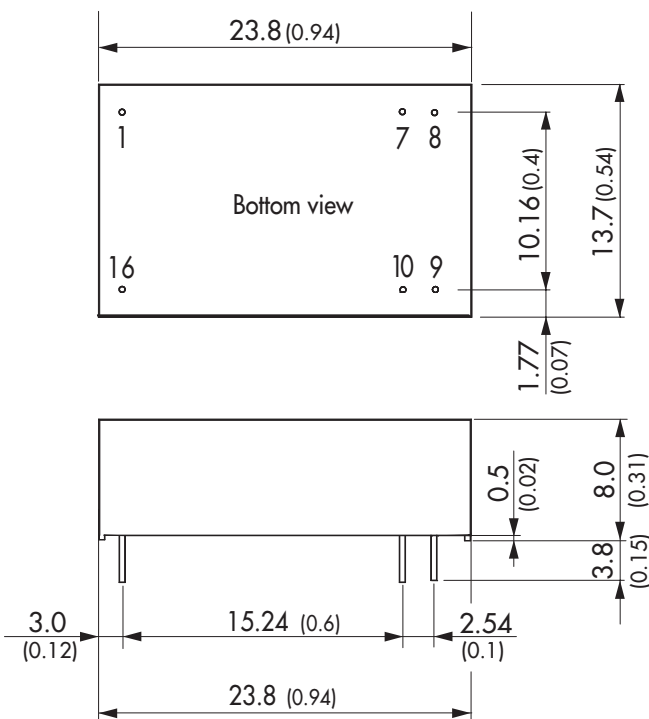
Ordercode	Input voltage range	Output voltage	Output current max.	Efficiency typ.
TEL 2-0510	4.5 – 9 VDC (nominal 5 VDC)	3.3 VDC	500 mA	70 %
TEL 2-0511		5 VDC	400 mA	73 %
TEL 2-0512		12 VDC	165 mA	75 %
TEL 2-0513		15 VDC	135 mA	73 %
TEL 2-0521		±5 VDC	±200 mA	64 %
TEL 2-0522		±12 VDC	±85 mA	69 %
TEL 2-0523		±15 VDC	±65 mA	71 %
TEL 2-1210	9 – 18 VDC (nominal 12 VDC)	3.3 VDC	500 mA	73 %
TEL 2-1211		5 VDC	400 mA	77 %
TEL 2-1212		12 VDC	165 mA	80 %
TEL 2-1213		15 VDC	135 mA	80 %
TEL 2-1221		±5 VDC	±200 mA	73 %
TEL 2-1222		±12 VDC	±85 mA	78 %
TEL 2-1223		±15 VDC	±65 mA	78 %
TEL 2-2410	18 – 36 VDC (nominal 24 VDC)	3.3 VDC	500 mA	72 %
TEL 2-2411		5 VDC	400 mA	77 %
TEL 2-2412		12 VDC	165 mA	80 %
TEL 2-2413		15 VDC	135 mA	81 %
TEL 2-2421		±5 VDC	±200 mA	74 %
TEL 2-2422		±12 VDC	±85 mA	78 %
TEL 2-2423		±15 VDC	±65 mA	80 %
TEL 2-4810	36 – 75 VDC (nominal 48 VDC)	3.3 VDC	500 mA	71 %
TEL 2-4811		5 VDC	400 mA	73 %
TEL 2-4812		12 VDC	165 mA	79 %
TEL 2-4813		15 VDC	135 mA	79 %
TEL 2-4821		±5 VDC	±200 mA	71 %
TEL 2-4822		±12 VDC	±85 mA	77 %
TEL 2-4823		±15 VDC	±65 mA	77 %



**Physical Specifications**

Casing material	non conductive FR4
Potting material	epoxy, UL94V-0 - rated
Weight	5.1 g (0.17oz)
Soldering temperature	265°C / 10 s max.

**Outline Dimensions mm (inches)**



Pin-Out		
Pin	Single	Dual
1	-Vin (GND)	-Vin (GND)
7	NC	NC
8	NC	NC
9	+Vout	+Vout
10	-Vout	-Vout
16	+Vin	+Vin

NC = Not connected

Pin diameter  $\varnothing 0.5 \pm 0.05$  (0.02)  $\pm 0.002$   
Tolerances  $\pm 0.25$  ( $\pm 0.01$ )

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[TEL 2-0511](#) [TEL 2-1211](#) [TEL 2-2411](#) [TEL 2-4812](#) [TEL 2-4823](#) [TEL 2-2413](#) [TEL 2-0523](#) [TEL 2-1223](#) [TEL 2-4810](#)  
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