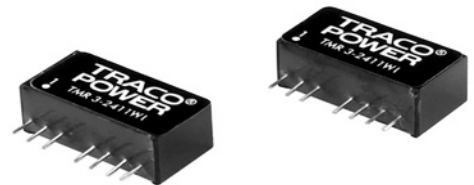


Features

- ◆ Highest power density in SIP package
- ◆ Ultra wide 4:1 input range
- ◆ Small footprint: 21.8 x 9.2 mm
- ◆ Temperature range -40° to $+85^{\circ}\text{C}$
- ◆ High efficiency up to 82%
- ◆ Excellent load and line regulation
- ◆ Short-circuit protection
- ◆ I/O isolation 1500 VDC
- ◆ Remote On/Off control
- ◆ 3-year product warranty



The TMR-3WI series is a new family of isolated 3W DC/DC converters with regulated output, featuring ultra-wide 4:1 input voltage range. The product comes in an ultra-compact SIP plastic package with a small footprint occupying only 2.0 cm² (0.3 square in.) of board space. An excellent efficiency allows -40° to $+85^{\circ}\text{C}$ operation temperatures.

Further features include remote On/Off control and continuous short circuit protection. The very compact dimensions of these converters make them an ideal solution for many space critical applications in battery-powered equipment and instrumentation.

Models				
Order code	Input voltage	Output voltage	Output current max.	Efficiency typ.
TMR 3-1210WI	4.5 – 18 VDC (12 VDC nominal)	3.3 VDC	700 mA	74 %
TMR 3-1211WI		5 VDC	600 mA	78 %
TMR 3-1212WI		12 VDC	250 mA	80 %
TMR 3-1213WI		15 VDC	200 mA	80 %
TMR 3-1221WI		± 5 VDC	± 300 mA	80 %
TMR 3-1222WI		± 12 VDC	± 125 mA	80 %
TMR 3-1223WI		± 15 VDC	± 100 mA	80 %
TMR 3-2410WI		9 – 36 VDC (24 VDC nominal)	3.3 VDC	700 mA
TMR 3-2411WI	5 VDC		600 mA	80 %
TMR 3-2412WI	12 VDC		250 mA	82 %
TMR 3-2413WI	15 VDC		200 mA	82 %
TMR 3-2421WI	± 5 VDC		± 300 mA	79 %
TMR 3-2422WI	± 12 VDC		± 125 mA	81 %
TMR 3-2423WI	± 15 VDC		± 100 mA	81 %
TMR 3-4810WI	18 – 75 VDC (48 VDC nominal)		3.3 VDC	700 mA
TMR 3-4811WI		5 VDC	600 mA	80 %
TMR 3-4812WI		12 VDC	250 mA	81 %
TMR 3-4813WI		15 VDC	200 mA	81 %
TMR 3-4821WI		± 5 VDC	± 300 mA	79 %
TMR 3-4822WI		± 12 VDC	± 125 mA	81 %
TMR 3-4823WI		± 15 VDC	± 100 mA	81 %

General Specifications

Isolation voltage (60 sec.)	- Input/Output	1'500 VDC
Isolation capacitance	- Input/Output	200 pF max.
Isolation resistance	- Input/Output (500 VDC)	>1 GOhm
Switching frequency		100 kHz min. (PFM)
Remote On/Off	- On: - Off: - Off stand by input current	open or high impedance 2...4 mA to applied via 1 kOhm resistor 2.5 mA max.
Vibration and thermal shock		MIL-STD-810F
Safety standards		UL /cUL 60950-1, IEC 60950-1:2005 (2nd Edition); +A1:2009
Safety approvals	- UL/cUL	www.ul.com -> certifications -> File: e188913
Environmental compliance	- Reach - RoHS	www.tracopower.com/products/reach-declaration.pdf RoHS Directive 2011/65/EU
Altitude	- operation - non operation - test report	< 40'000ft (12'000m) < 50'000ft (15'000m) www.tracopower.com/products/tmr3wi-altitude.pdf

Physical Specifications

Casing material		non-conductive plastic
Potting material		silicone, UL 94V-0 rated
Weight		4.8 g (0.17oz)

Application note: www.tracopower.com/products/tmr3wi-application.pdf

Outline Dimensions



Pin-Out		
Pin	Single	Dual
1	-Vin (GND)	-Vin (GND)
2	+Vin (Vcc)	+Vin (Vcc)
3	Remote On/Off	Remote On/Off
5	No con.	No con.
6	+Vout	+Vout
7	-Vout	Common
8	No con.	-Vout

Dimensions in [mm], () = Inch
Pin dimension tolerances 0.1 (0.004)
Pin pitch tolerances: ±0.25 (±0.01)
Tolerances: ±0.5 (±0.02)

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