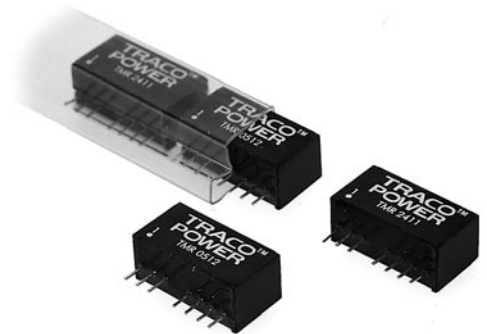




Features

- ◆ Wide 2:1 Input Voltage Range
- ◆ Compact SIP-8 Package
- ◆ Small Footprint
- ◆ Full SMD Design
- ◆ Temperature Range -40° to $+75^{\circ}\text{C}$
- ◆ High Efficiency
- ◆ Excellent Load and Line Regulation
- ◆ Indefinite Short-circuit Protection
- ◆ I/O-Isolation 1000VDC
- ◆ Remote On/Off Control
- ◆ Fully RoHS compliant
- ◆ 3 Year Product Warranty



The TMR-2 series is a family of isolated 2W dc-dc converter modules with regulated output, featuring wide 2:1 input voltage ranges. The product comes in a compact SIP-8 plastic package with small footprint occupying only 2.0 cm² (0.3 square in.) of board space.

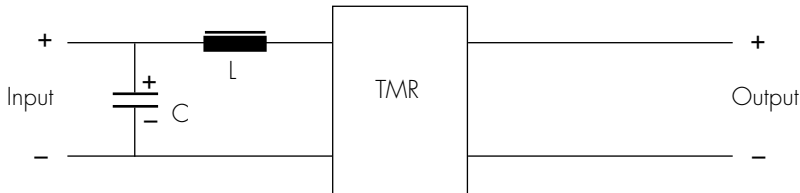
An excellent efficiency allows -40° to $+75^{\circ}\text{C}$ operation temperatures at full load. Further features include remote On/Off control and continuous short circuit protection. The ultra-compact dimensions of these converters make them an ideal solution for many space critical applications in communication equipment, instrumentation and industrial electronics.

Models

Ordercode	Input voltage range	Output voltage	Output current max.	Efficiency typ.
TMR 0510	4.5 – 9.0 VDC	3.3 VDC	500 mA	64 %
TMR 0511		5 VDC	400 mA	66 %
TMR 0512		12 VDC	165 mA	71 %
TMR 0521		± 5 VDC	± 200 mA	64 %
TMR 0522		± 12 VDC	± 85 mA	69 %
TMR 0523		± 15 VDC	± 65 mA	71 %
TMR 1210	9 – 18 VDC	3.3 VDC	500 mA	70 %
TMR 1211		5 VDC	400 mA	73 %
TMR 1212		12 VDC	165 mA	80 %
TMR 1221		± 5 VDC	± 200 mA	73 %
TMR 1222		± 12 VDC	± 85 mA	78 %
TMR 1223		± 15 VDC	± 65 mA	78 %
TMR 2410	18 – 36 VDC	3.3 VDC	500 mA	71 %
TMR 2411		5 VDC	400 mA	74 %
TMR 2412		12 VDC	165 mA	81 %
TMR 2421		± 5 VDC	± 200 mA	74 %
TMR 2422		± 12 VDC	± 85 mA	78 %
TMR 2423		± 15 VDC	± 65 mA	80 %
TMR 4810	36 – 75 VDC	3.3 VDC	500 mA	70 %
TMR 4811		5 VDC	400 mA	73 %
TMR 4812		12 VDC	165 mA	79 %
TMR 4821		± 5 VDC	± 200 mA	71 %
TMR 4822		± 12 VDC	± 85 mA	77 %
TMR 4823		± 15 VDC	± 65 mA	77 %

EMC Characteristics

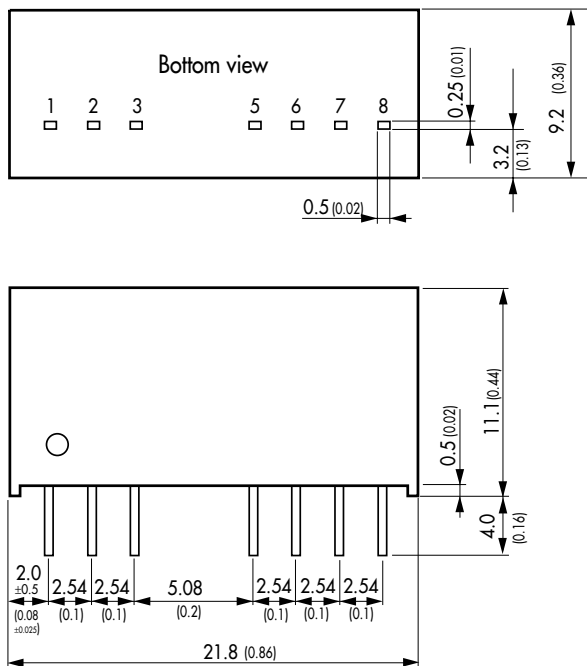
- Use an electrolytic low ESR capacitor at input side to reduce reflected ripple current.
- In order to meet EN55022 class B additionally use a choke to build an L/C filter as follows:



Recommended values for filter:

Input	C	L
5VDC	100µF	10µH
12VDC	100µF	10µH
24VDC	10µF	120µH
48VDC	10µF	120µH

Outline Dimensions mm (inches)



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

Specifications can be changed any time without notice