

# T02 SERIES

# IMPEDANCE MATCHING TRANSFORMERS

Most of RF Power Sources are designed and optimized to best deliver power into an impedance of 50 Ohms. In a power delivering system where the source and load impedance differs by more than 2:1 a matching element can improve efficiency. T&C offers a range of LF Band matching transformers for high (and low) impedance load applications.

The table below presents some standard impedance ratios offers by T&C.

**CASE OPTIONS:**

1. W 4" x L 4" x H 3" (102mm x 102mm x 77mm). Deep Drawn enclosure, ZERO Corp.,#Z64-64A
2. Custom sizes and configurations on request
3. Connectors: "BNC" type input and output

## T02-4

**STEP-DOWN/STEP-UP TRANSFORMER**  
**AIR COOLED**  
*SUT 02 LF-4 (previous revision)*

**STEP UP MATCHING**

(Z in = 50 Ohms) Frequency Range 50 kHz – 500 kHz, peak performance 300 kHz.  
 Extended frequency range operation possible at reduced power level.

Z IN RF Input	Z OUT RF Output	Impedance ratio	OUT #	Continues P IN (Without cooling)
50 Ohms	200 (+/- 10%) Ohms	1 : 4	1	100 W
50 Ohms	450 (+/- 5%) Ohms	1 : 9	2	100 W
50 Ohms	800 (+/- 5%) Ohms	1 : 16	3	100 W
50 Ohms	1250 (+/- 5%) Ohms	1 : 25	4	100 W

**STEP DOWN MATCHING**

Reversing the INPUT with OUTPUT terminals.  
 (Z in = 50 Ohms) Frequency Range 50 kHz – 500 kHz, peak performance 300 kHz.  
 Extended frequency range operation possible at reduced power level.

RF Input to Terminal #	Z out RF Output	Impedance ratio	OUT	Continues P IN (Without cooling)
4 - 50 Ohms	2 (+/- 5%) Ohms	25 : 1	On RF IN	100 W
3 - 50 Ohms	3.1 (+/- 5%) Ohms	16 : 1	On RF IN	100 W
2 - 50 Ohms	5.6 (+/- 10%) Ohms	9 : 1	On RF IN	100 W
1 - 50 Ohms	12.5 (+/- 15%) Ohms	4 : 1	On RF IN	100 W

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SUT 02 LF-4

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