

T03 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 5" x L 6" x H 4" (127mm x 153mm x 102mm). Utility Cabinet Steel Type CU-729 metallic gray box
2. Custom sizes and configurations on request
3. Connectors: "BNC" type Input and Banana Plug Test Terminals for outputs

T03-5

STEP-DOWN/STEP-UP TRANSFORMER
AIR COOLED
SUT 03 LF-5 (previous revision)

STEP UP MATCHING

(Z in = 50 Ohms) Frequency Range 10 kHz – 300 kHz, 500 kHz max at reduced power level.

Z IN RF Input	Z OUT RF Output	Impedance ratio	OUT #	Max P IN (Without cooling)
50 Ohms	50 (+/- 20%) Ohms	1 : 1	1	300 W
50 Ohms	200 (+/- 10%) Ohms	4 : 1	2	300 W
50 Ohms	450 (+/- 5%) Ohms	9 : 1	3	300 W
50 Ohms	800 (+/- 5%) Ohms	16 : 1	4	250 W
50 Ohms	1250 (+/- 5%) Ohms	25 : 1	5	250 W

STEP DOWN MATCHING

Reversing the INPUT with OUTPUT terminals

(Z in = 50 Ohms) Frequency Range 10 kHz – 300 kHz; 500 kHz max with reduced power level.

RF Input to Terminal #	Z OUT RF Output	Impedance ratio	OUT	Max P IN (Without cooling)
5 = 50 Ohms	2 (+/- 5%) Ohms	1: 25	On RF IN	250 W
4 = 450 Ohms	3.1 (+/- 5%) Ohms	1 : 16	On RF IN	250 W
3 = 50 Ohms	5.6 (+/- 10%) Ohms	1 : 9	On RF IN	300 W
2 = 50 Ohms	12.5 (+/- 15%) Ohms	1 : 4	On RF IN	300 W
1 = 50 Ohms	50 (+/- 20%) Ohms	1 : 1	On RF IN	300 W

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SUT 03 LF-5

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