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SUT 03 LF-5, STEP-UP (STEP-DOWN) TRANSFORMERS FOR IMPEDANCE MATCHING

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 152.5mm x 102mm). BUD Inc., Utility Cabinet p/n CU-729, steel, metallic gray box.
2. Custom sizes and configurations on request.
3. Connectors: "BNC" type Input, Output banana sockets (custom on request; see note!).

SPECIFICATIONS

For $Z_{in} = 50$ Ohms, the following output matching is available. Frequency Range 0.05 MHz to 0.5 MHz typical, to > 1 MHz

Z IN	Z OUT	Impedance ratio	Continues P IN (Without cooling)	Max P IN	Peak-to-peak Voltage
50 ohms	50 Ohms	1 : 1	300 W	500 W	~ 345 V p-p @ 300 W
50 ohms	200 Ohms	1 : 4	300 W	500 W	~ 690 V p-p @ 300 W
50 ohms	450 Ohms	1 : 9	300 W	500 W	~ 1030 V p-p @ 300 W
50 ohms	800 Ohms	1:16	300 W	500 W	~ 1380 V p-p @ 300 W
50 ohms	1250 Ohms	1:25	300 W	400 W	~ 1730 V p-p @ 300 W

F opr.	0.05	0.15	0.25	0.35	0.45	0.55	0.65	0.75	0.85	0.95	1.05
	MHz	MHz	MHz	MHz	MHz	MHz	MHz	MHz	MHz	MHz	MHz
FWD[W]	100	100	100	100	100	100	100	100	100	100	100
REV[W]	0	0	0	1	2	3	5	6	8	10	12
FWD[W]	200	200	200	200	200	200	200	200	200	200	200
REV[W]	0	0	1	3	5	8	11	15	18	22	26
FWD[W]	300	300	300	300	300	300	300	300	300	300	300
REV[W]	0	1	2	5	9	13	18	23	28	34	39