

CONSTRUCTION AND TEST DATA FOR PJ2T 160 m INV-L 50:28 OHM TRANSMISSION LINE TRANSFORMER UNUNS.

19 JAN 2006 - W8WTS.

NOTES:

- 1) Each core wrapped with one layer of 3M 27 glass cloth tape.
- 2) Windings are AWG per Sevick, HAPT insulation.
- 3) Soldered junctions are covered with Kapton tape and glass cloth tape.
- 4) Yellow brass connection hardware is secured with Loctite 242 threadlocker.

50:28 ohm unun, design from Sevick, "Building and Using Baluns and Ununs", pp 64-65.

Built 16 JAN 2006 - W8WTS
 Measured 17 JAN 2006 - W8WTS.
 Core CWSBytemark F-240-61
 Spec mu 125 H/m
 Measured mu 130 H/m
 Turns 7
 Load 27 ohms

| f | SWR | Z (ohm) | R (ohm) | XL (ohm) |
|----------|-----|---------|----------|----------|
| 1.80E+06 | 1 | 51 | 51.01 | #NUM! |
| 3.50E+06 | 1 | 51 | 51.01 | #NUM! |
| 7.00E+06 | 1.1 | 53 | 52.84977 | 3.987658 |
| 1.40E+07 | 1.4 | 60 | 57.7027 | 16.44379 |
| 2.10E+07 | 1.6 | 71 | 67.78427 | 21.12564 |
| 2.80E+07 | 1.9 | 90 | 87.37527 | 21.57689 |

50:28 ohm unun, design from Sevick, "Building and Using Baluns and Ununs", pp 64-65.

Built 16 JAN 2006 - W8WTS
 Measured 17 JAN 2006 - W8WTS.
 Core Amidon FT-240-K
 Spec mu 290 H/m
 Measured mu 185 H/m
 Turns 6
 Load 27 ohms

| f | SWR | Z (ohm) | R (ohm) | XL (ohm) |
|----------|-----|---------|----------|----------|
| 1.80E+06 | 1 | 51 | 51.01 | #NUM! |
| 3.50E+06 | 1 | 51 | 51.01 | #NUM! |
| 7.00E+06 | 1.1 | 52 | 51.80452 | 4.504576 |
| 1.40E+07 | 1.3 | 57 | 55.56654 | 12.70273 |
| 2.10E+07 | 1.4 | 64 | 62.39459 | 14.24481 |
| 2.80E+07 | 1.6 | 77 | 75.76629 | 13.7284 |