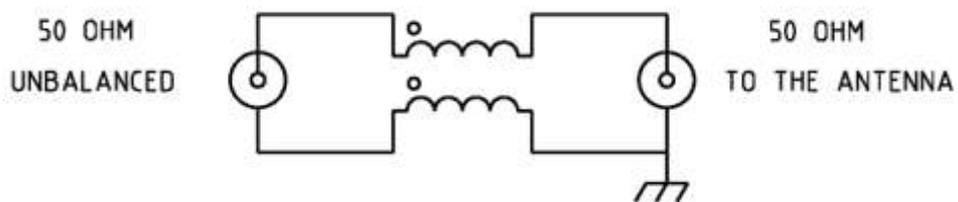


# CHOKING BALUN FOR LOW BAND VHF

Choking balun for upper HF to lower VHF bands. (10MHz - 60MHz).

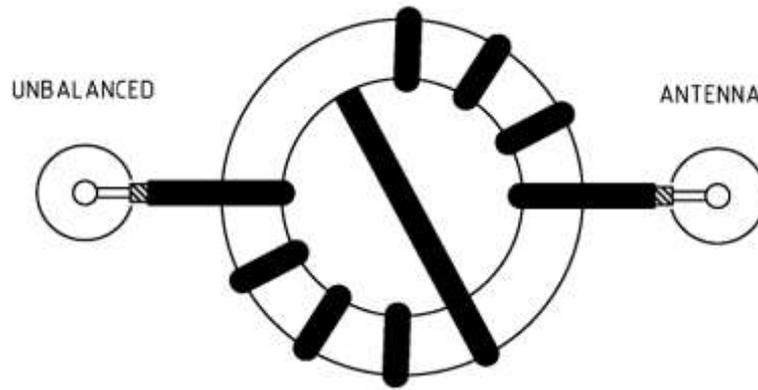
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Requiring a choking balun to isolate the potential common mode RF on the coax cable for a new 6m band Ringo antenna.



**Figure 1** Schematic of the 1:1 choking balun

Type	Choking Balun
Ratio	1:1
Frequency Range	14 ~ 54MHz
Choking Impedance	2k Ohms minimum. <i>Ref: Figure 3</i>
Core Used	FT140-43 Ferrite Toroid Core
Number of turns	8 (4 + 4). <i>Ref: Figure 2</i>
SWR	1:1 <i>Ref: Figure 4</i>



**Figure 2** Winding details of the 1:1 choking balun

## Construction

The construction was simply to wind 8 turns of RG174 coax onto a FT140-43 Ferrite Toroid Core. The result of 8 turns achieved an average of 40uH lumped value inductive reactance to common mode RF currents from approximately 10MHz to 70MHz.

Parts list.

- FT140-43 Ferrite Toroid Core
- About 0.3mtr of RG174 coax.
- 2 x N type chassis mount connector
- Sealed Polycarbonate Enclosures 82 x 80 x 55mm



**Photo 1** Low band choking balun assembled.



**Photo 2** Rear view of the Low band choking balun assembled showing the hose clamp mast attachments.