

Drake TC-3300-LP QRO LP Filter

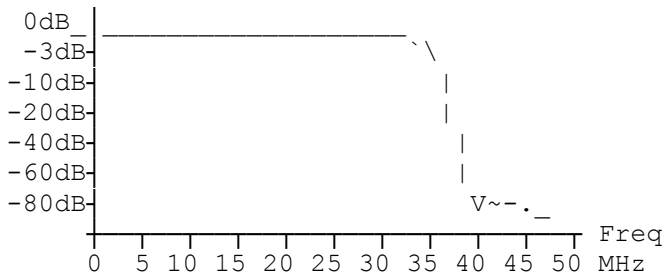
By G8MNY

(Updates May 07)

(8 Bit ASCII Graphics use code page 437 or 850)

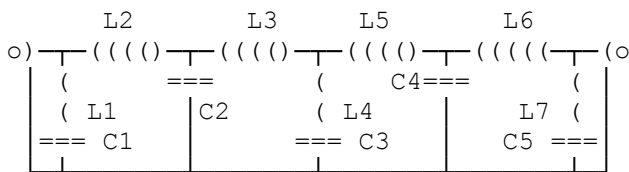
I have reverse engineered this high performance QRO HF Tx filter. It was used with a QRO PA & it is nice to know, that no matter what QRM you may cause other HF users, above HF all is quieter than can be measured!

The specification is 1kW MAX @ HF, Attenuation > 80dB above 41MHz. Through loss is practically unmeasurable (< 0.05dB?).



THE CIRCUIT

This is a type of M derived Low Pass filter with 3 suckout trap sections, as well as 1/2 + 1 + 1/2 Pi low pass sections.

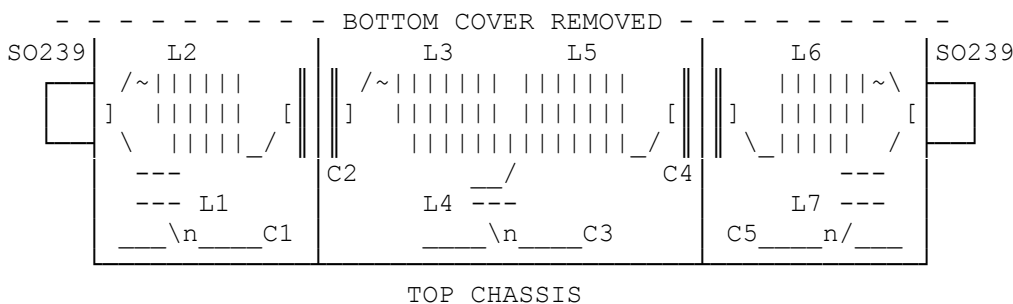


Coils are silver plated 3mm Y wire.  
 L1 = L7 = 0.3uH, 8.5 T on 9mm former.  
 L2 = L6 = 0.4uH, 7 T on 15mm former.  
 L4 = 0.13uH, 3.5 T on 9mm former.  
 L3/5 = 0.4uH each, wound as centre tapped of 15T on 15mm former.

C1 = C5 = 53pF bolted through Mica washer disk.  
 C2 = C4 = 186pF bolted through double sided Mica washer disks.  
 C3 = 124pF larger bolted through Mica washer disk.

The 3 shunt traps L1/C1, L4/C3, & L7/C5 all resonate at 40MHz.

PHYSICAL CONSTRUCTION



The SO239s are riveted on, as are the 2 divider plates. The top chassis has folded edges tapped for screws etc. not shown here for simplicity. The bottom U channel shaped cover is screwed on into the folded edges & it has RF fingering to help ground the 2 central dividers. The cover is the bottom base mounting. (eg. above is then upside down in use.)

Why Don't U send an interesting bul?

73 de John, G8MNY @ GB7CIP