



Venton Rocket EXL-S PLL LNB

MODIFICATION FOR EXTERNAL REFERENCE

”I did it my way”

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(From 06.10.2019 notes)

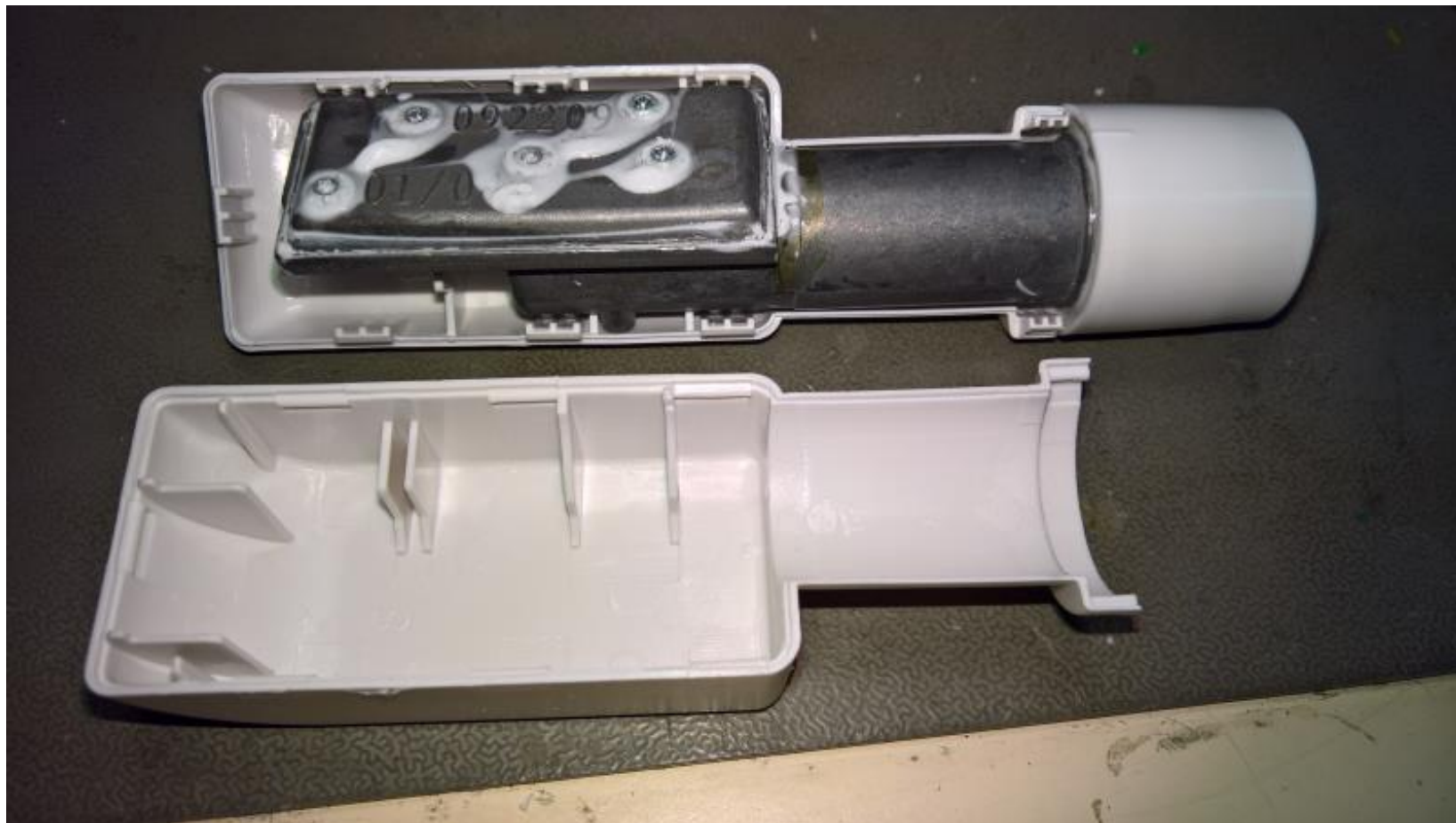
VENTON EXL-S PLL LNB "ROCKET"

Case opens with e.g. a long knife and care
Your safety is YOUR responsibility!



VENTON EXL-S PLL LNB "ROCKET"

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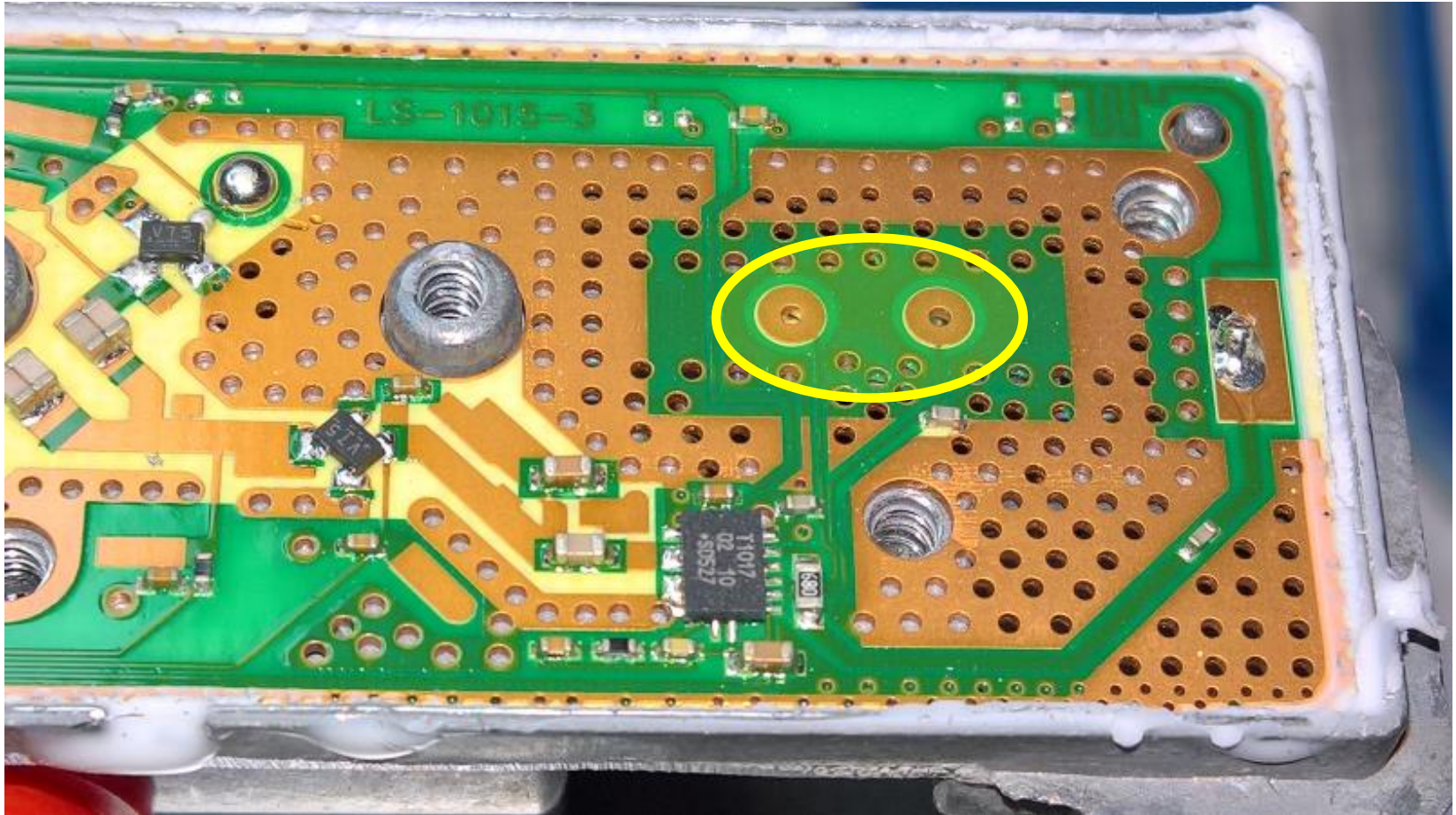
VENTON EXL-S PLL LNB "ROCKET"

Remove silicone rubber from circumference with sharp, cutting tool
Remove Torx screws as are, with silicone rubber



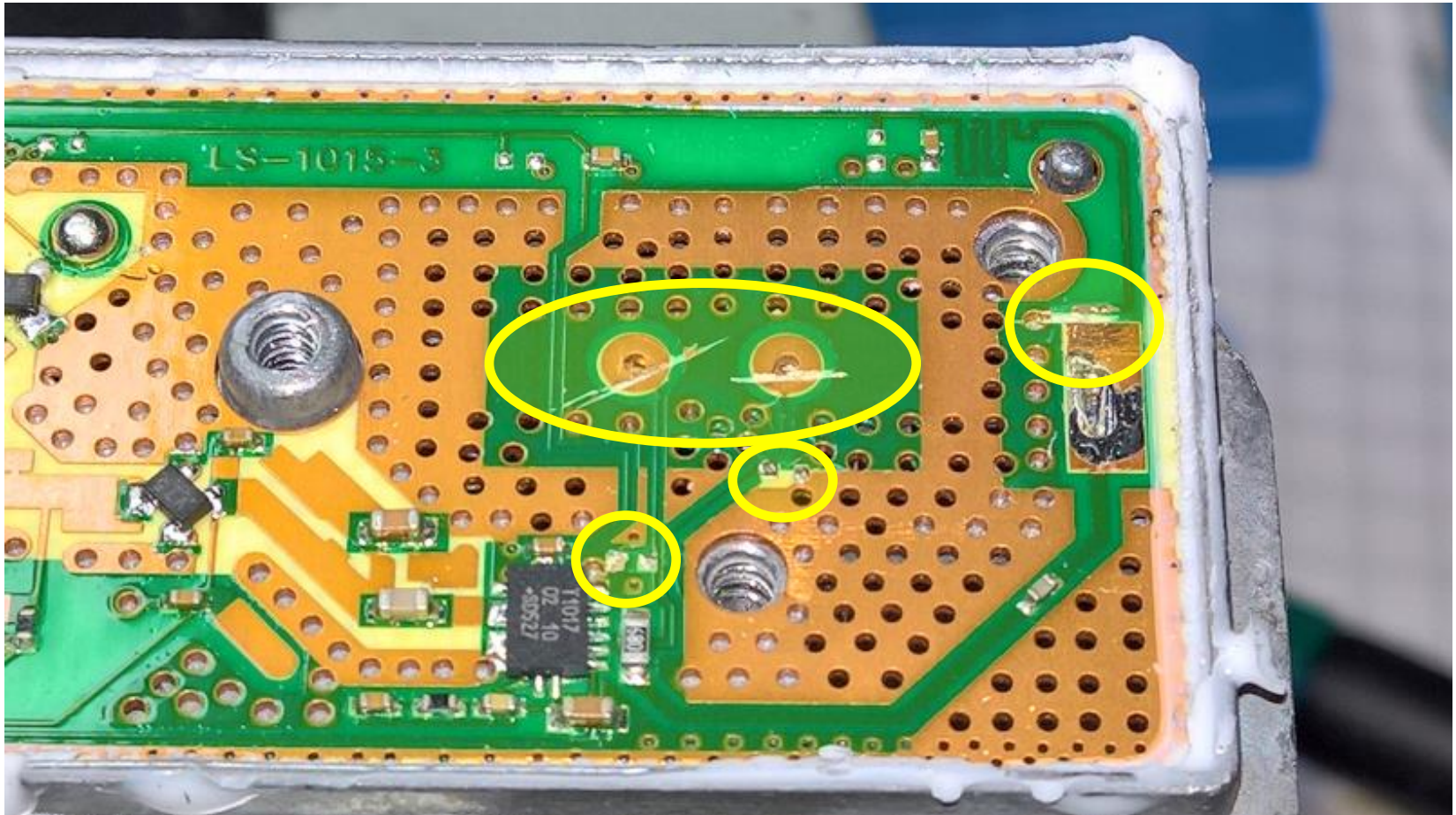
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25 MHz crystal is below PCB (underneath, ground plane side)



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Cut lines to crystal and DC bias line
Remove two oscillator chip capacitors



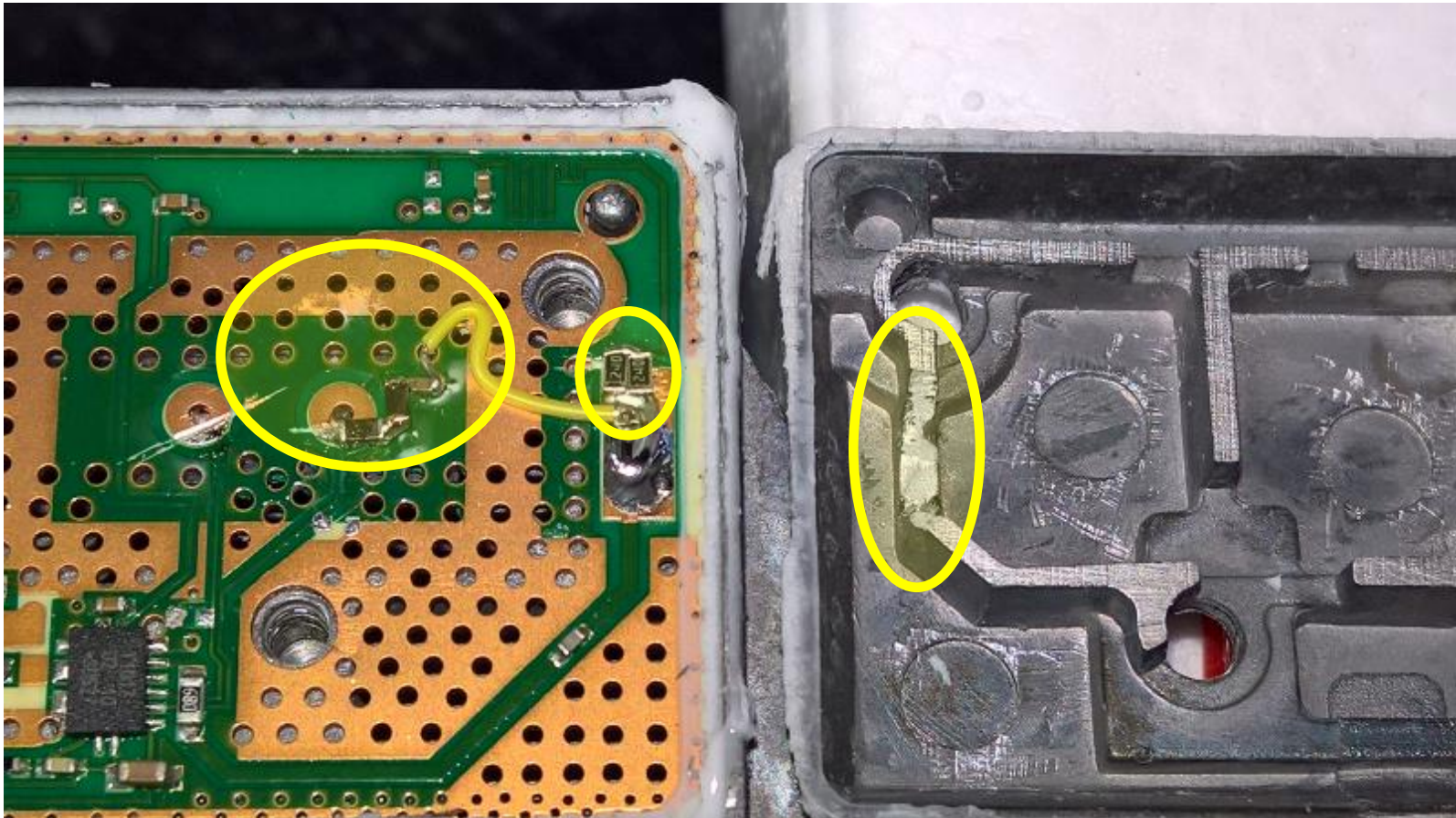
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Add 25 MHz series resonance (I use 12pF/2.7uH) circuit to leftmost pad

Add wrap wire jumper to IF connector center pin

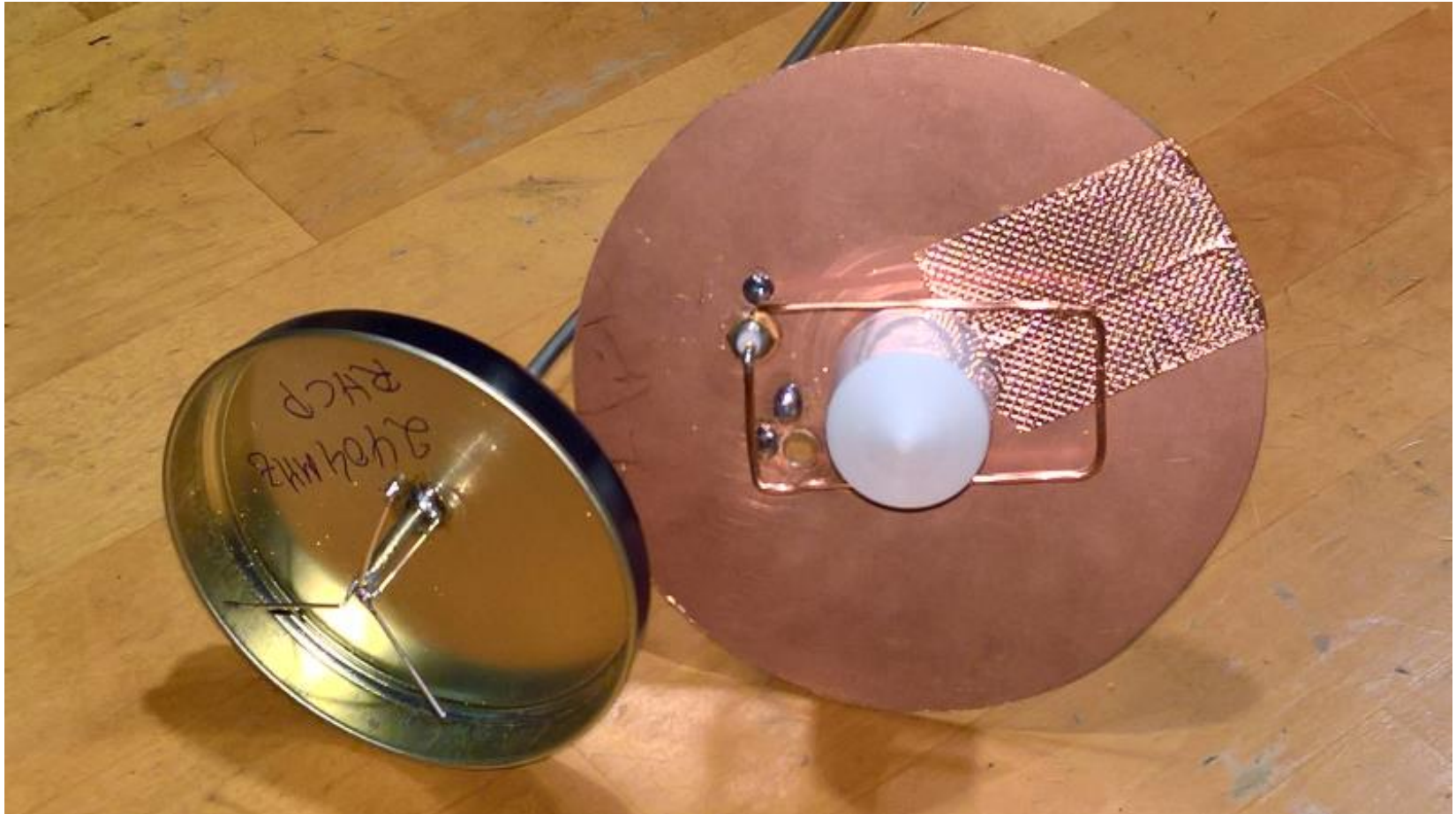
Add two parallel 24Ω SMD resistors in series with DC line

Cut/file slot in aluminium housing (cover) for wrap wire



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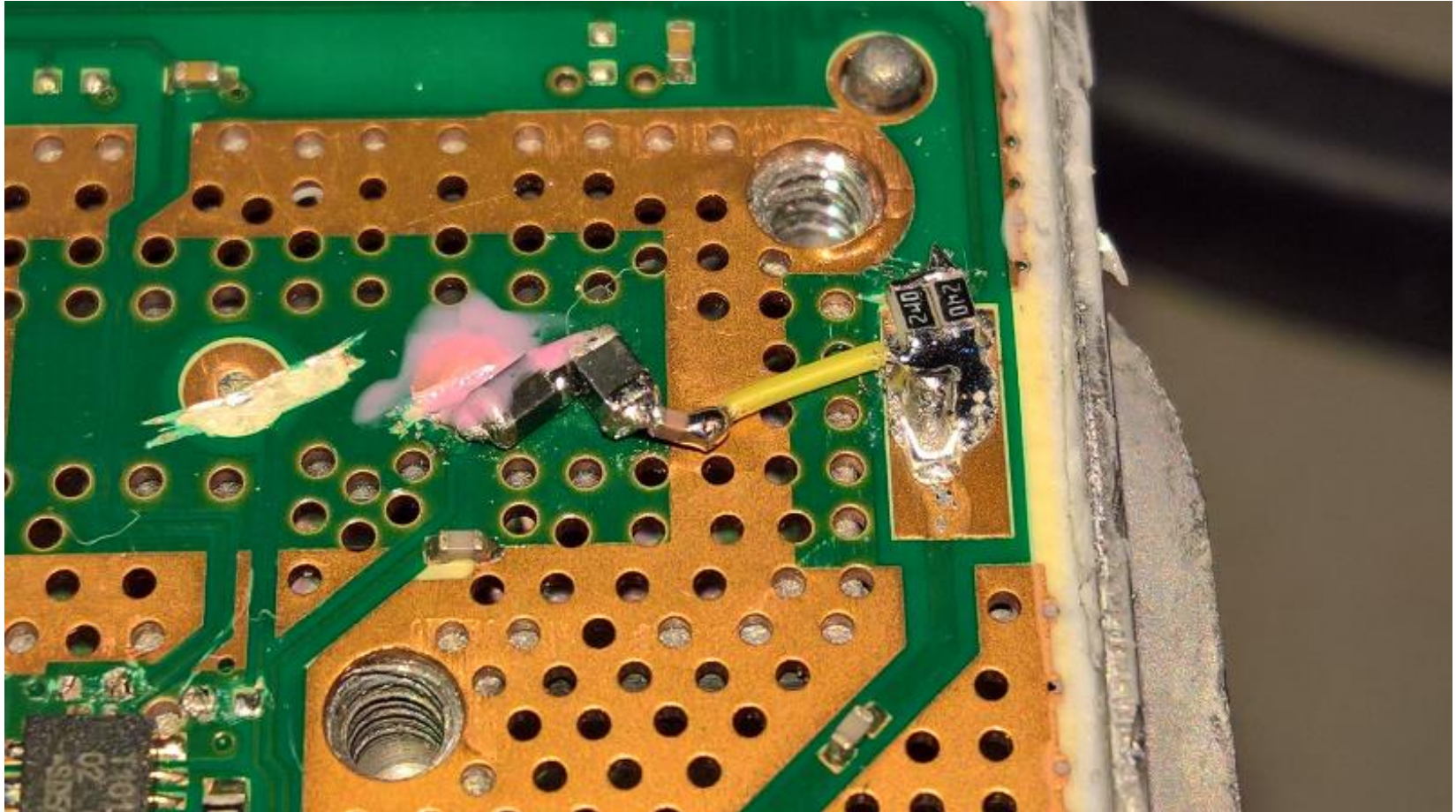
Experimenting with 2.4 GHz LHCP Oblong Feed for long focal distance dish
(RHCP 2.4 GHz Tripole for circularity and pattern experiments against dish feed)



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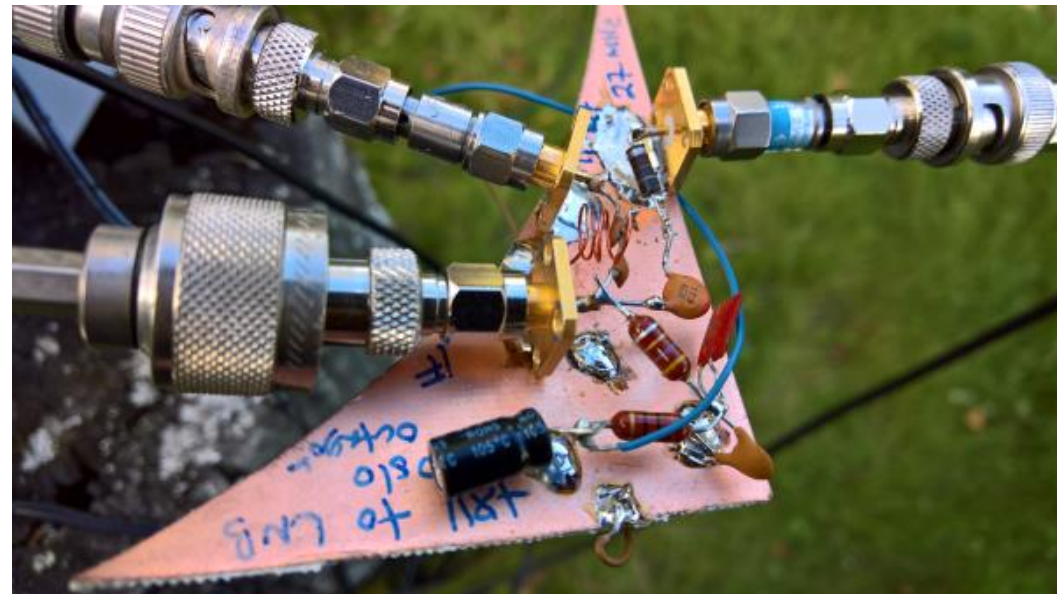
Second example, left original crystal oscillator second capacitor intact

After reassembly and testing(!), seal case with e.g. Loctite SI 5980 Gasket Sealant Paste



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Experimenting with Marconi 35cm offset dish and DC Bias Lashup

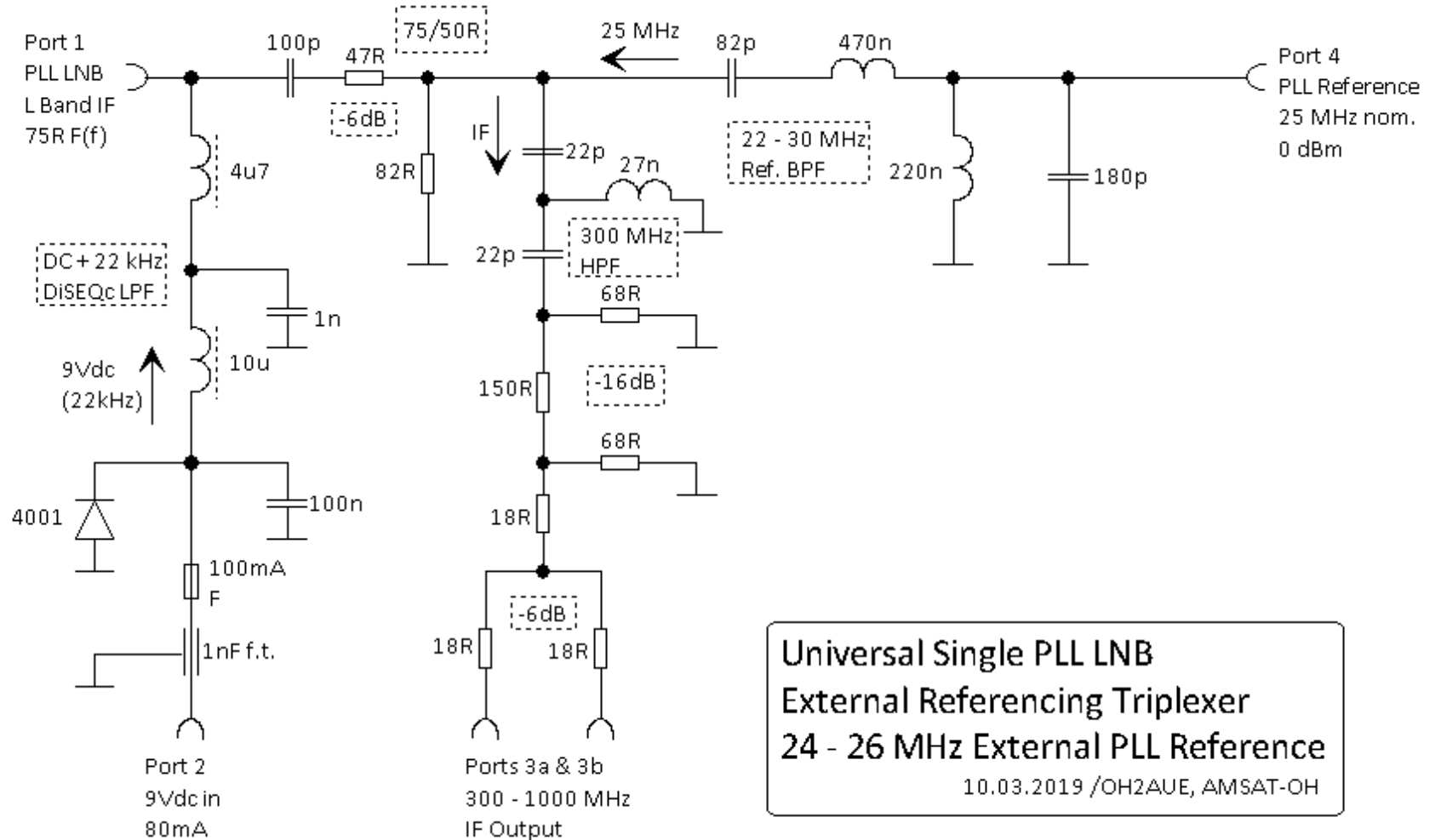


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Two examples of modified PLL LNB receiving QO-100 CW beacon

- <https://www.youtube.com/watch?v=8PtT0Faz3VM>
- https://www.youtube.com/watch?v=1W5Xkwc5d_A

Example of Triplexer (OH2AUE/AMSAT-OH)



**THE
BEGINNING**