FlexRadio Systems
Software Defined Radios

Engineering Change Order Procedure ECO-0031 for the SDR-100WPA – Issued February 7, 2007

Note: These modifications are only required on amplifiers that are RoHS compliant. All units shipped after January 1, 2007 should be checked.

The definitive way to determine if the 100WPA is RoHS compliant is to remove the top cover and inspect the 100WPA circuit board. If the circuit board is blue, it is RoHS compliant. If the circuit board is green, this ECO is not required.

Overview of Changes

This document outlines engineering changes to the SDR-100WPA in the following areas:

1. Change C53 from a chip capacitor to a dipped mica capacitor for improved RF output on 12 and 10 meters

The following section outlines the procedure for modifying the amplifier. Note that all steps can be performed from the top of the PCB without removing it from the heat sink.

The following items are required for the ECO:

Quantity	Description
1	1200pf dipped mica capacitor

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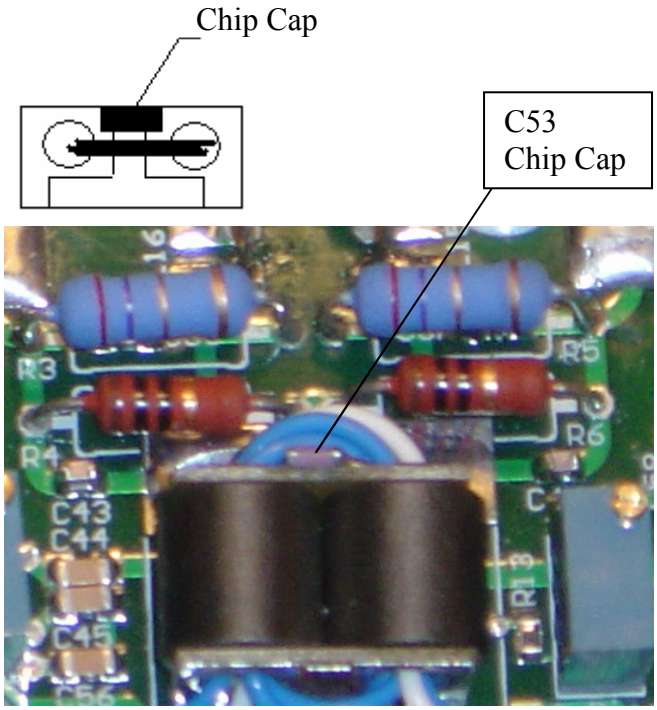
Replacing C53 the 1200pf chip capacitor with a 1200pf dipped mica capacitor on T2 (100WPA)

This ECO is applied to T2 on the 100WPA board. T2 is the small binocular transformer behind the larger binocular core on the PCBA.

On the side of T2 facing T1, the large output binocular transformer, is mounted a chip capacitor at the upper edge. Carefully remove this capacitor.



Bend the leads of the 1200pf dipped mica and install as shown below. Make the leads as short as possible. Have the value markings facing up.

Re-solder the 1200pf dipped mica capacitor

Run the PA Calibrate Routine in PowerSDR after the modification

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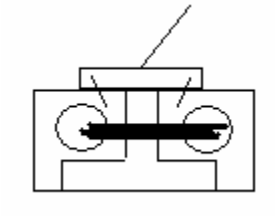
1200pf dipped mica



1200pf
dipped mica