

Crystal Grounding

W5USJ Drawing 12 Mar 2011 rev 2 mar 2012

Here's another method of grounding crystals that allows the crystal to be grounded and still plug into a SIP machined-pin socket.

Install and solder all three pins of a 3-pin length of a SIP connector**

Trim the crystal leads to a length of 3/16 inch.

Plug one of the clipped leads into the center hole of the 3-pin SIP socket

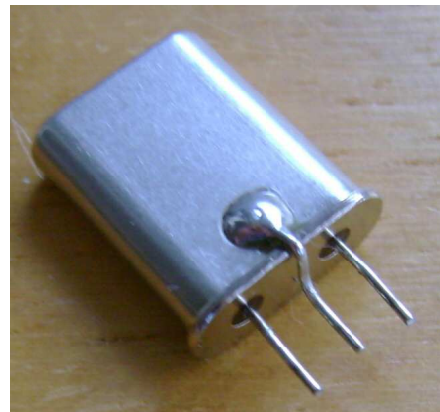
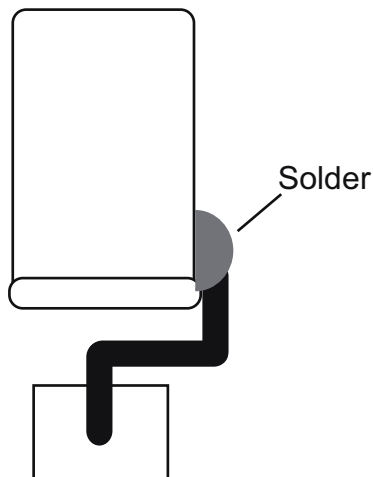
Bend the lead over 90 degrees

Plug the crystal into the socket

Bend the wire up 90 degrees so it touches the bottom of the crystal

Using as little heat as possible, solder the lead to the bottom edge of the crystal.

Result: A removeable crystal with grounded case



** If there is no center grounded hole, and there is no circuit between the crystal pads, drill a hole about 0.050 in the center between the pads. Connect a ground wire to the socket pin extending through and to any adjacent grounded pad.

If there is a circuit run between the crystal mounting pads clip off the bottom length of the middle pin. Carefully solder a wire to the remaining stub. Be careful to not melt the socket around the pin. Plug another pin into the middle socket to act as a heatsink. Mount the socket in place and run the lead to the closest component ground pad.