



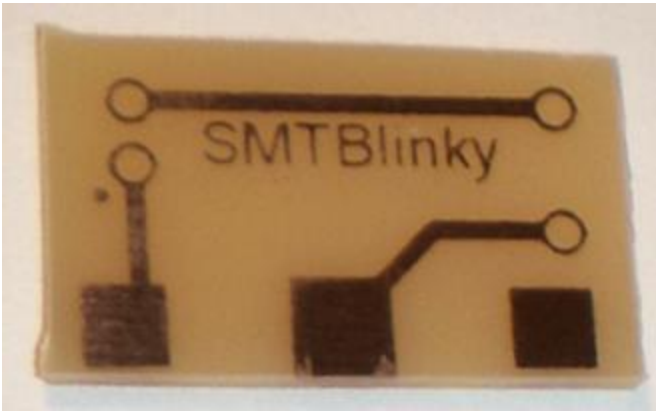



SMTBlinky



Step	Picture	Detail
ABOUT		
<p>While working on the SMTTester, I realized that a tiny blinky led would be really cool. Turns out the cheapest way to make an SMTBlinky, Was to use a conventional blinking LED.</p> <p>SMTBlinky designed by Charley Jones, PMP aka Dataman For SMTBoards.Com 4/2011</p>		
PARTS LIST		

ABOUT

PARTS LIST

1	 A clear plastic bag containing the SMTBlinky kit. A white card is inside with the text: "SMTBlinky By SMTBoards.Com Learn to solder SMT with really big parts. Instructions at: http://SMTBoards.Com/10".	Kit as distributed Available soon.
1a	 A clear plastic bag showing the contents of the kit: a red LED, a 100ohm resistor, a small strip of wire, and the SMTBlinky board.	Kit Contents, Details follow.
1b	 A small, rectangular, yellowish-brown printed circuit board (PCB) with the text "SMTBlinky" printed on it. It has several circular pads and a small rectangular pad.	SMTBlinky Board
1c	 A red, cylindrical LED with two long, thin metal leads.	Blinking LED Note: the longer lead is +. The shorter lead is -.
1d	 A small, cylindrical resistor with a gold band and two long, thin metal leads.	100ohm resistor 1/4 watt
1e	 A small, curved, green wire.	Small strip of wire

REQUIRED / NOT PROVIDED

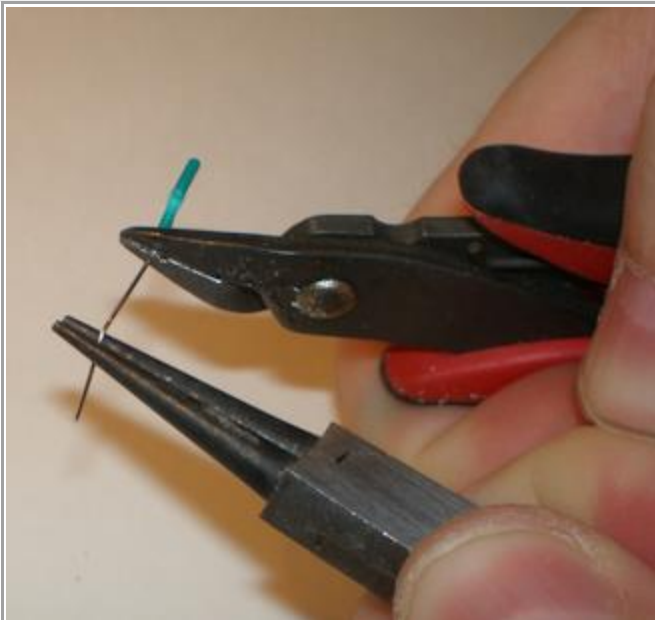
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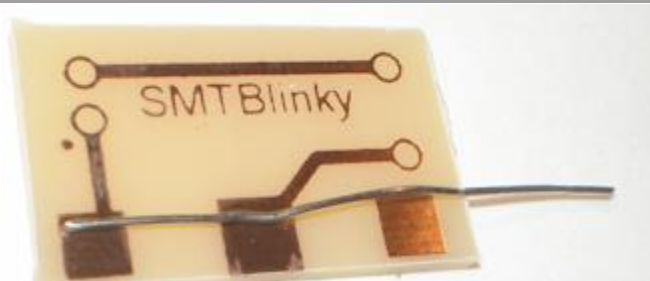
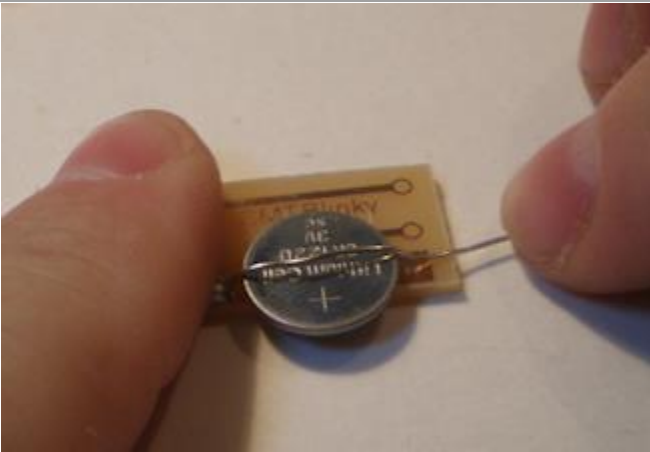

CR1220 3V Battery.

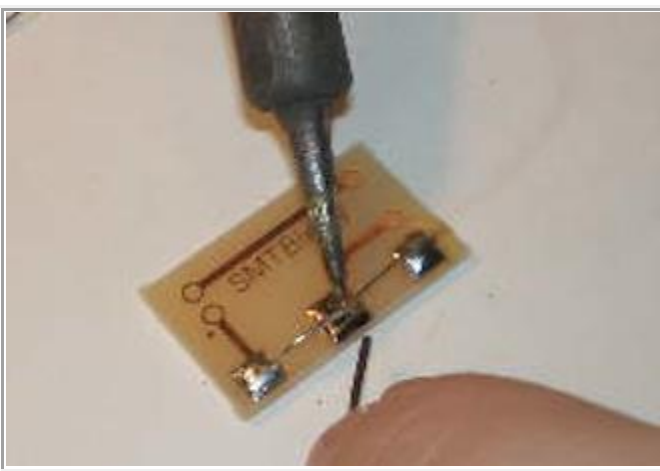
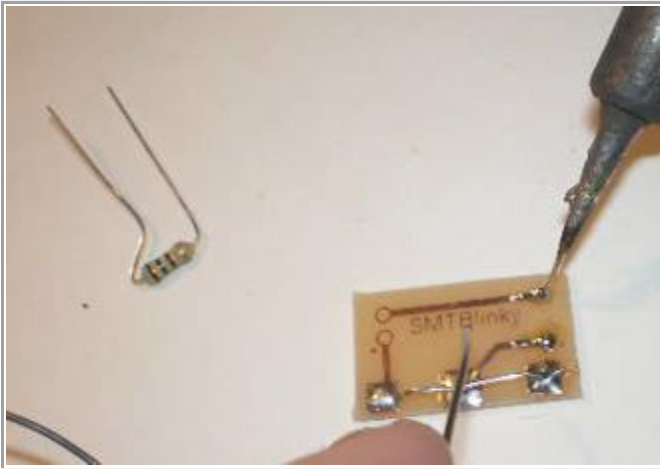

ASSEMBLY INSTRUCTIONS

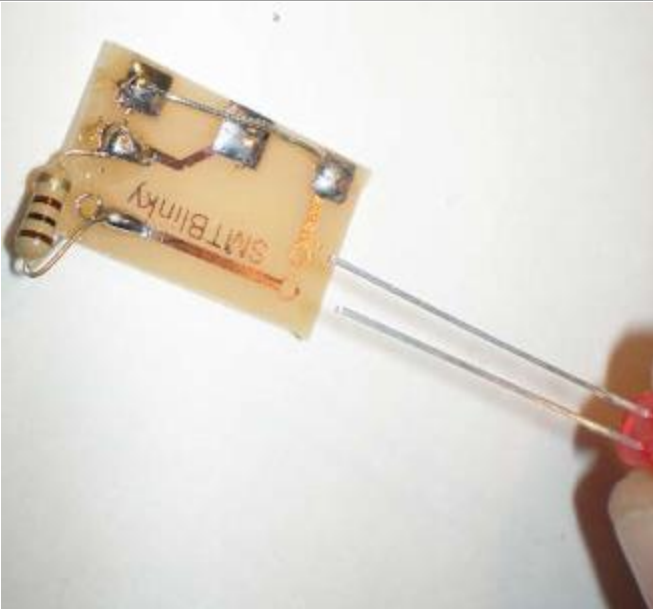

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Begin by stripping the wire.

4	 A yellow PCB labeled "SMTBlinky" is shown. A thin wire is placed across two circular pads on the board. The wire extends to the right, beyond the right pad.	<p>Place the wire across the battery pads, with the excess to the right. Drop a glop of solder on the left pad to hold the wire in place.</p>
5	 A hand is holding a small, round, silver battery under the wire on the PCB. The battery is being used as a spacer to push the wire down onto the pads.	<p>Next, place the battery under the wire as a spacer. Push down on the wire till it meets the right pad. Battery should be snug. Don't worry if it's a little loose, we'll fix that later.</p>
6	 A soldering iron is being used to heat the wire on the right pad. A pair of pliers is holding the wire steady. The battery is still in place under the wire.	<p>Drop a glop of solder on the right pad, head the glop and with another tool, push the wire into the glop. Remove the heat and wait for the solder to cool before removing the hold down tool.</p>

7		<p>To make the battery snug, drop a bit of solder onto the center pad. Not too much.</p>
8		<p>Drop two glops of solder on the pads to the right. Bend the resistor as shown.</p>
9		<p>Solder the straight leg to the pad nearest the battery. Try to solder as close to the edge as possible to avoid interfering with the battery. Finish by soldering to the topmost glop.</p>

10	 A small yellow PCB labeled 'SMTBlinky' is shown. It has a resistor and a long LED lead attached. The LED lead is being held by a pair of pliers.	<p>The LED must be soldered in the proper orientation. The longer leg is soldered on the battery side.</p>
11	 The LED is bent at a right angle near the lens portion. It is being soldered onto the PCB. The longer leg is soldered on the battery side.	<p>Bend the LED at a right angle near the lens portion. Sit the LED onto the glops you just made and heat to lock in place. You may apply more solder if needed. Be sure not to bridge the gap between the two pads. Clip when done.</p>

12		<p>Next, you may carefully bend the resistor more onto the board. You may do the same for the LED. Be very careful not to overdo or you may pull a trace off the board.</p>
13		<p>Next, insert the battery till snug. It does not need to fit all the way onto the board.</p>
USAGE INSTRUCTIONS		

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Our record is 57 hours continuous on 1 battery. Use them as trail markers, toppers for toy fire trucks, scary Halloween blinky eyes, or anything else you can imagine.

To preserve battery life, remove battery when not in use.