

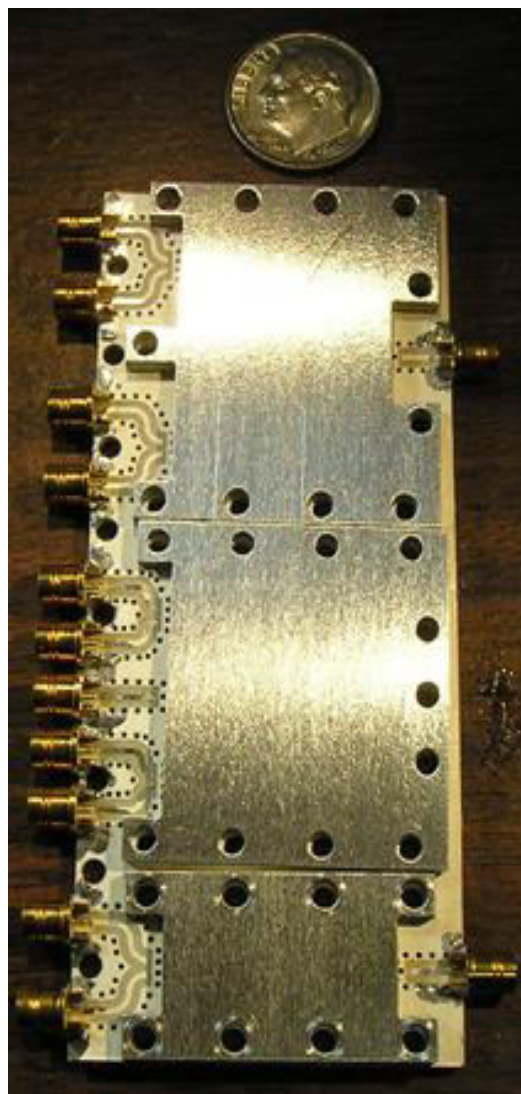
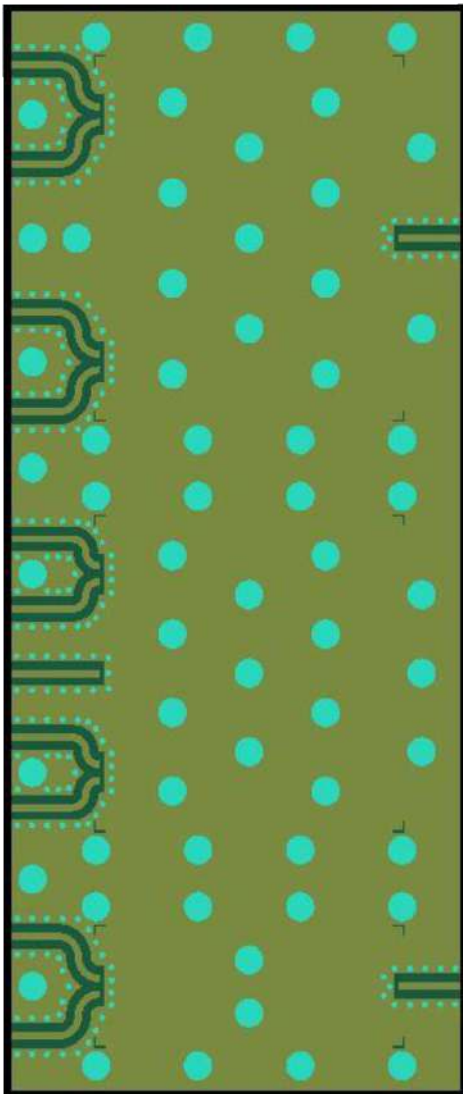


Datasheet Part Number: [Evaluation-Board-2-Way-4-Way-RF-Splitters](#)

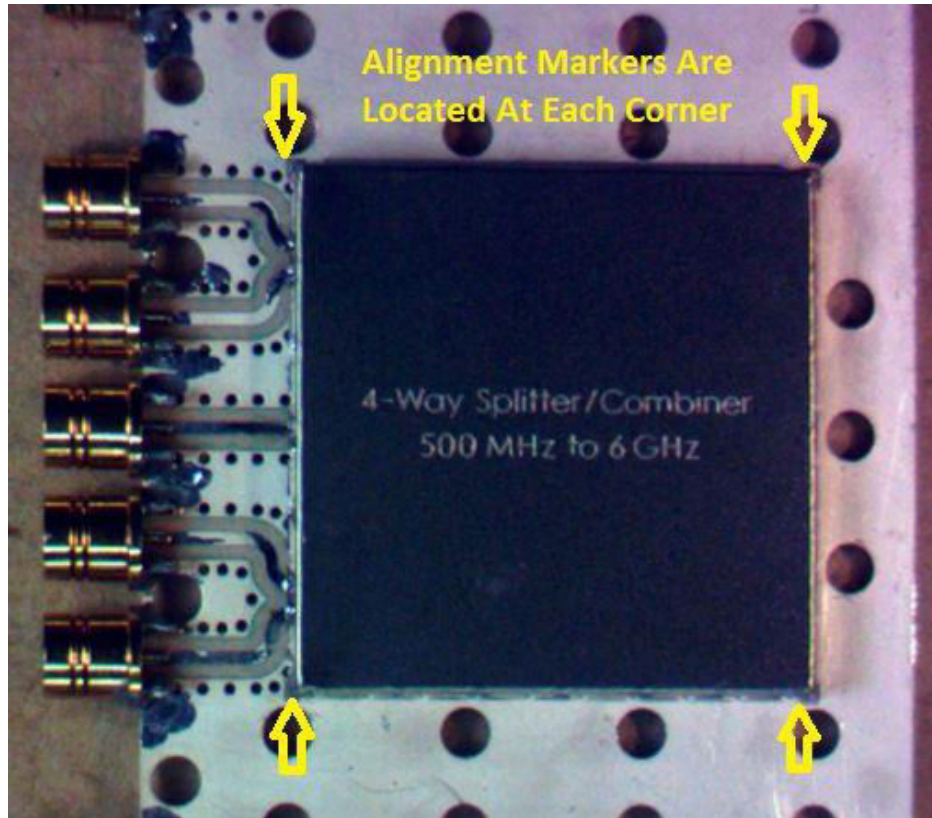
Description: Shown below is an Evaluation Board For BBTLine's 2-Way, 4-Way Version 1, and 4-Way Version 2 Surface Mount RF Splitters.

The left image shows the bare board artwork with no RF Splitters present - just the ground plane, RF traces and ground vias are shown. The right image shows the assembled evaluation board with SMP style connectors (male, smooth-bore SMP connectors) and "pressure plates" placed over the RF Splitters (Splitters themselves are not shown as they are hidden by the "pressure plates").

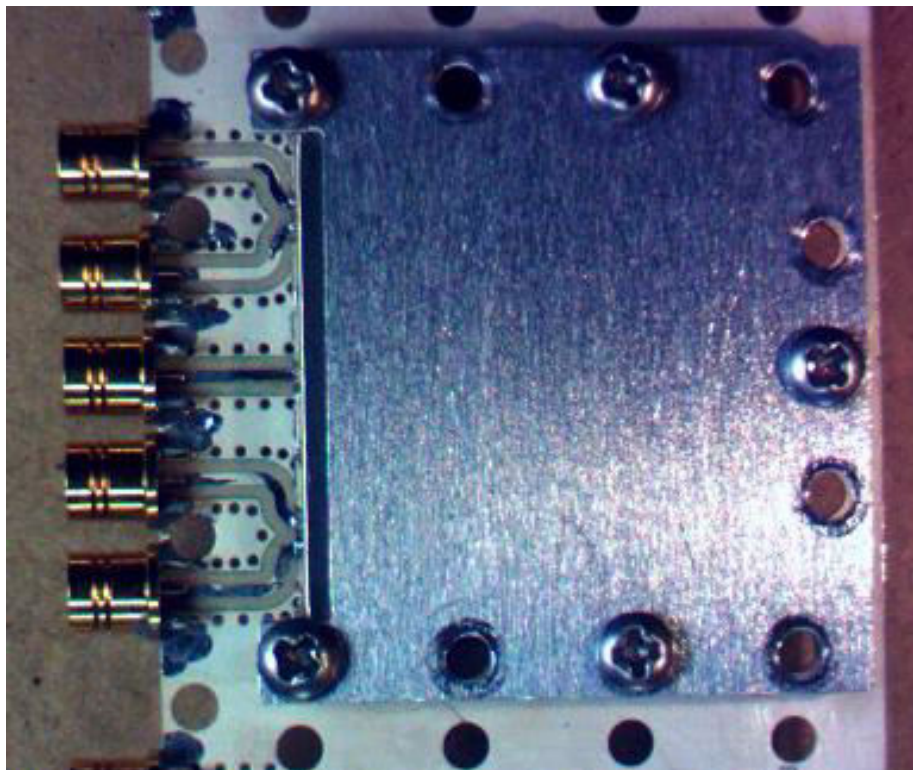
The "pressure plates" are placed over the RF Splitter shield cans and allow the user to test the RF Splitters without having to solder together the two ground planes (i.e. ground plane of the evaluation board and ground plane of the Splitter) - only the RF traces need to be soldered. The same pressure plates are applied to the backside of the evaluation board to increase the overall rigidity/flatness of the evaluation board.



The image below shows how the [4-Way Version 1 RF Splitter](#) is mounted on the evaluation board:



The image below shows how a “plate” is secured over the 4-Way Version 1 Splitter:



The image below shows the correct alignment between the evaluation board RF traces and the Splitter half-cut vias.

The half-cut via circumferences are aligned right to the ends of the RF traces.

This alignment, along with very “clean” soldering methods, are critical for performance of the splitter to 7 GHz.

By “clean” it is meant that a minimal amount of solder should be used at the half-cut vias - any excess solder should be solder-wicked away (use Chemtronics 30 mil wide wick) to minimize excess parasitic capacitance.

