WHAT IS CLAIMED IS:

1. A radio frequency (RF) energy transmission line transition configured to couple RF energy between a pair of RF transmission line sections disposed on intersecting surfaces of a corresponding one of a pair of conductive members, a first one of the pair of conductive members having a first portion overhanging an end portion of a second one of the pair of conductive members, an end portion of an electrically conductive strip of a first one of the pair of RF transmission line sections being disposed on, and electrically connected to, an end portion of an electrically conductive strip of a second one of the pair of RF transmission line sections,

wherein the electrically conductive strip of the first one of the pair of RF transmission line sections is entirely in contact with at least two surfaces of the first one of the pair of conductive members, and

wherein the at least two surfaces of the first one of the pair of conductive members comprise a first surface and a second surface orthogonal to the first surface.

2. The RF energy transmission line transition of claim 1,

wherein a first inner portion of the electrically conductive strip of the first one of the pair of RF transmission line sections electrically conducts along a first axis,

wherein the electrically conductive strip of the second one of the pair of RF transmission line sections electrically conducts along a second axis, and

wherein the first axis is orthogonal to the second axis.

3. The RF energy transmission line transition of claim 2, wherein the at least two surfaces of the first one of the pair of conductive members further comprise a third surface opposite the first surface and orthogonal to the second surface, and

wherein a second inner portion of the electrically conductive strip of the first one of the pair of RF transmission line sections is attached to and extends along the third surface of the first one of the pair of conductive members.

4. The RF energy transmission line transition of claim 3, wherein the third surface of the first one of the pair of conductive members is a top surface of the first one of the pair of conductive members, and

wherein the first one of the pair of conductive members has a bottom surface, opposite the top surface, in contact with a heat sink.

5. The RF energy transmission line transition of claim 4, wherein the second one of the pair of conductive members has a bottom surface in contact with the heat sink.

6. The RF energy transmission line transition of claim 5, wherein the bottom surface of the first one of the pair of conductive members forms a first plane,

wherein the bottom surface of the second one of the pair of conductive members forms a second plane, and

wherein the first plane and the second plane are the same plane.

7. The RF energy transmission line transition of claim 2, wherein the first portion of the first one of the pair of conductive members overhangs the end portion of the electrically conductive strip of the first one of the pair of RF transmission line sections and overhangs the end portion of the electrically conductive strip of the second one of the pair of RF transmission line sections.

8. The RF energy transmission line transition of claim 7, wherein the end portion of the electrically conductive strip of the first one of the pair of RF transmission line sections is attached to and extends along the first surface, and

wherein the first inner portion of the electrically conductive strip of the first one of the pair of RF transmission line sections is attached to and extends along the second surface.

9. A radio frequency (RF) energy transmission line transition configured to couple RF energy between a pair of RF transmission line sections disposed on a pair of intersecting surfaces, comprising:

a first one of the pair of RF transmission line sections disposed on a first one of the pair of intersecting surfaces, comprising:

a first electrically conductive member;

a first dielectric disposed on the first electrically conductive member; and

a first electrically conductive strip disposed on the first dielectric;

a second one of the pair of RF transmission line sections disposed on a second one of the pair of intersecting surfaces, comprising:

a second electrically conductive member having a first surface portion disposed on the first one of the pair of intersecting surfaces and a second surface portion disposed on the second one of the pair of intersecting surfaces;

a second dielectric disposed on the first surface portion and the second surface portion of the second electrically conductive member; and

a second electrically conductive strip having an end portion disposed on both: a first surface portion of the second dielectric and a second surface portion of the second dielectric,

wherein the end portion of the second electrically conductive strip disposed on the first surface portion of the second dielectric is disposed on and electrically connected to the first electrically conductive strip,

wherein the second electrically conductive strip is entirely on at least two surfaces of the second electrically conductive member, and

wherein the at least two surfaces of the second electrically conductive member comprise a first surface and a second surface that are orthogonal to each other.

10. The RF energy transmission line transition of claim 9, wherein the intersecting surfaces are orthogonal surfaces.

11. The RF energy transmission line transition of claim 10, wherein the second electrically conductive member has a bottom surface in contact with a heat sink.

12. The RF energy transmission line transition of claim 9, wherein the at least two surfaces of the second electrically conductive member further comprise a third surface orthogonal to the second surface.

13. The RF energy transmission line transition of claim 12, wherein the first electrically conductive member has a bottom surface in contact with a heat sink.

14. The RF energy transmission line transition of claim 9, wherein the second electrically conductive member comprises a block of conductive material, the block

having a wall with a jog therein for receiving a front portion of the first one of the pair of RF transmission line sections, a wall of the jog having the end portion of the second electrically conductive strip disposed on the first surface portion of the second dielectric is disposed on and electrically connected to the first electrically conductive strip.

15. The RF energy transmission line transition of claim 9, wherein a portion of the second electrically conductive strip electrically conducts along a first axis,

wherein the first electrically conductive strip electrically conducts along a second axis, and

wherein the first axis is orthogonal to the second axis.

16. A radio frequency (RF) transmission line structure, comprising:

a first RF transmission line section, comprising:

a first electrically conductive member having a horizontal surface;

a first dielectric disposed on the horizontal surface; and

a first electrically conductive strip disposed on the first dielectric;

a second RF transmission line section, comprising:

a second electrically conductive member having a vertical surface portion and a horizontal surface portion;

a second dielectric disposed on the vertical surface portion and the horizontal surface portion of the second electrically conductive member; and

a second electrically conductive strip disposed on the second dielectric; and

a transition region wherein an end portion of the second electrically conductive strip disposed on the second dielectric is electrically connected to the first electrically conductive strip,

wherein the second electrically conductive strip is entirely on at least two surfaces of the second electrically conductive member, and

wherein the at least two surfaces of the second electrically conductive member comprise the vertical surface portion and the horizontal surface portion.

17. The RF transmission line structure of claim 16, wherein a portion of the second electrically conductive strip electrically conducts along a first axis,

wherein the first electrically conductive strip electrically conducts along a second axis, and

wherein the first axis is orthogonal to the second axis.

18. The RF transmission line structure of claim 16, wherein the second electrically conductive member comprises a block of conductive material, the block having a wall with a jog therein for receiving a front portion of the second RF transmission line section, a wall of the jog having the end portion of the second electrically conductive strip disposed on the second dielectric is disposed on and electrically connected to the first electrically conductive strip.

19. The RF transmission line structure of claim 16, wherein the horizontal surface portion is a first horizontal portion, and

wherein the at least two surfaces of the second electrically conductive member further comprise a second horizontal portion.

20. The RF transmission line structure of claim 16, wherein the second electrically conductive member has a bottom surface in contact with a heat sink, and

wherein the first electrically conductive member has a bottom surface in contact with the heat sink.