WHAT IS CLAIMED IS:

1. A microwave transmission line structure, comprising;

a pair of ground strip conductors on a surface of a dielectric substrate structure;

a signal strip conductor disposed on the surface of the dielectric substrate structure between the pair of ground strip conductors;

a dielectric disposed over: the signal strip conductor; and the surface of the dielectric substrate structure between the pair of ground strip conductors;

an electrically conductive shield member disposed over the dielectric and having a first portion on, and in direct contact with, upper surfaces of the pair of ground strip conductors and a second portion disposed vertically over the signal strip conductor; and

wherein the signal strip conductor has a notch in a side thereof, such notch being disposed under the electrically conductive shield member.

2. The microwave transmission line structure recited in claim 1 wherein the second portion of the electrically conductive shield member is disposed over and covers a first portion of the signal strip conductor, a second portion of the signal strip conductor being uncovered by the electrically conductive shield member.

3. The microwave transmission line structure recited in claim 1 including:

a ground plane conductor disposed on a bottom surface of the dielectric substrate structure; and

wherein the electrically conductive shield member is electrically connected to the ground plane conductor.

4. The microwave transmission line structure recited in claim 2 including:

a ground plane conductor disposed on a bottom surface of the dielectric substrate structure; and

wherein the electrically conductive shield member is electrically connected to the ground plane conductor.

5. A microwave transmission line structure, comprising:

a pair of ground strip conductors on a surface of a dielectric substrate structure;

a signal strip conductor disposed on the surface of the dielectric substrate structure between the pair of ground strip conductors;

a dielectric disposed over: the signal strip conductor; and the surface of the dielectric substrate structure between sides of each one of the ground strip conductors;

an electrically conductive shield member disposed along microwave transmission line structure, the electrically conductive shield member having: a first portion being disposed on, and in direct contact with, upper surfaces of the pair of ground strip conductors; and a second portion disposed vertically over the signal strip conductor; and

wherein the electrically conductive shield member has wide portions and narrow portions and wherein the wide portions are electrically interconnected with the narrow portions, and;

wherein the narrow portions are disposed over the signal strip conductor.

6. The microwave transmission line structure recited in claim 5 wherein: the wide portions of the electrically conductive shield member are disposed over and cover first portions of the signal strip conductor; and second portions of the signal strip conductor are uncovered by the electrically conductive shield.

7. The microwave transmission line structure recited in claim 5 including:

a ground plane conductor disposed on a bottom surface of the dielectric substrate structure; and

wherein the electrically conductive shield member is electrically connected to the ground plane conductor.

8. The microwave transmission line structure recited in claim 6 including:

a ground plane conductor disposed on a bottom surface of the dielectric substrate structure; and

wherein the electrically conductive shield member is electrically connected to the ground plane conductor.

9. A microwave transmission line structure, comprising:

a plurality of serially connected microwave transmission line structure sections, each one of the sections comprising:

a pair of ground strip conductors on a surface of a dielectric substrate structure;

a signal strip conductor disposed on the surface of the dielectric substrate structure between the pair of ground strip conductors;

a solid dielectric layer disposed over: the signal strip conductor; and the surface of the dielectric substrate structure between sides of each one of the ground strip conductors;

an electrically conductive shield member disposed on the solid dielectric layer and on, and in direct contact with, upper surfaces of the pair of ground strip conductors;

wherein the electrically conductive shield member is disposed over a first portion of the signal strip conductor, second portions of the signal strip conductor being uncovered by the electrically conductive shield member, the first portion of the signal strip conductor being disposed between the pair of second portions of the signal strip conductor; and

wherein the electrically conductive shield member has wide portions and narrow portions and wherein the wide portions are electrically interconnected with the narrow portions, and;

wherein the narrow portions are disposed over portions of the signal strip conductor adjacent to the second, uncovered portions of the strip conductors.

10. The microwave transmission line structure recited in claim 9 wherein each one of the one of the plurality of microwave transmission line structure sections has the same predetermined input impedance.

11. The microwave transmission line structure recited in claim 10 wherein the plurality of microwave transmission line structure sections are spaced at predetermined positions along the microwave transmission line structure.

12. A microwave transmission line structure, comprising;

a pair of ground strip conductors on a surface of a dielectric substrate structure;

a signal strip conductor disposed on the surface of the dielectric substrate structure between the pair of ground strip conductors;

a solid dielectric layer disposed over: the signal strip conductor; and the surface of the dielectric substrate structure between the pair of ground strip conductors;

an electrically conductive shield member disposed over the solid dielectric layer and having a wide portion on, and in direct contact with, upper surfaces of the pair of ground strip conductors and a narrow portion disposed vertically over the signal strip conductor;

and

wherein the solid dielectric layer has outer sides disposed over the pair of ground strip conductors and wherein the electrically conductive shield member is disposed on the outer sides of the solid dielectric layer; and

wherein the wide portions and narrow portions are electrically interconnected with the narrow portions, and;

wherein the narrow portions are disposed vertically over the signal strip conductor.

13. The microwave transmission line structure recited in claim 5 wherein the solid dielectric layer has outer sides disposed over the upper surfaces of the pair of ground strip conductors and wherein the electrically conductive shield member is disposed on the outer sides of the solid dielectric layer.

14. The microwave transmission line structure recited in claim 9 wherein the solid dielectric layer has outer sides of each one of the a plurality of serially connected microwave transmission line structure sections is disposed over upper surfaces of the pair of ground strip conductors and wherein the electrically conductive shield member is disposed on the outer sides of the pair of ground plane conductors.

15. A microwave transmission line structure, comprising;

a pair of ground strip conductors on a surface of a dielectric substrate structure;

a signal strip conductor disposed on the surface of the dielectric substrate structure between the pair of ground strip conductors;

a dielectric layer disposed over: the signal strip conductor; and the surface of the dielectric substrate structure between the pair of ground strip conductors;

an electrically conductive shield member disposed over the dielectric and having a first portion on, and in direct contact with, upper surfaces of the pair of ground strip conductors and a second portion disposed vertically over the signal strip conductor; and

wherein the second portion of the electrically conductive shield member is narrower than the signal strip conductor.

16. A microwave transmission line structure, comprising;

a pair of ground strip conductors on a surface of a dielectric substrate structure;

a signal strip conductor disposed on the surface of the dielectric substrate structure between the pair of ground strip conductors;

a dielectric disposed over: the signal strip conductor; and the surface of the dielectric substrate structure between the pair of ground strip conductors;

an electrically conductive shield member disposed on over the dielectric and having a first portion on, and in direct contact with, upper surfaces of the pair of ground strip conductors and a second portion disposed vertically over the signal strip conductor; and

wherein the first portion of the electrically conductive shield member bridges an underlying portion of the signal strip conductor and is dielectrically separated from the underlying portion of the signal strip conductor by a portion of the dielectric layer, and

wherein the underlying portion of the signal strip conductor is narrower than portions of the signal strip conductor adjacent to the underlying portion of the signal strip conductor.

17. The microwave transmission line structure recited in claim 1 wherein the second portion of electrically conductive shield member is disposed over a first portion of the signal strip conductor, a second portion of the signal strip conductor being uncovered by the electrically conductive shield member and wherein the first portion of the signal strip conductor has notch therein, such first portion of the signal strip conductor being is narrower than the uncovered portion of the signal strip conductor.

18. A microwave transmission line structure, comprising;

a pair of ground strip conductors on a surface of a dielectric substrate structure;

a signal strip conductor disposed on the surface of the dielectric substrate structure between the pair of ground strip conductors;

a dielectric disposed over the signal strip conductor and the pair of ground strip conductors;

an electrically conductive shield member disposed over the dielectric, comprising:

a first portion having:

a first end on, and in direct contact with, upper surfaces of a first one of the pair of ground strip conductors;

a second end on, and in direct contact with, upper surfaces of a second one of the pair of ground strip conductors; and

a bridging portion connected between the first end and the second end, the bridging portion being disposed over of the signal strip conductor bridging portion; and

a second portion disposed between, and dielectrically separated by the dielectric from the pair of ground strip conductors, the second portion being disposed longitudinally over, parallel to, and dielectrically separated by the dielectric from, the

signal strip conductor, and the second portion being connected to the bridging portion of the electrically conductive shield member.

19. The microwave transmission line structure recited in claim 18 wherein the second portion of electrically conductive shield member is narrower than the signal strip conductor.

20. The microwave transmission line structure recited in claim 19 wherein the underlying portion of the signal strip conductor is narrower than portions of the signal strip conductor that are not under-lying the bridging portions.

21. The microwave transmission line structure recited in claim 18 wherein the first portion is wider than the second portion.

22. A microwave transmission line structure, comprising:

a pair of ground strip conductors disposed longitudinally along a surface of a dielectric substrate structure ;

a signal strip conductor disposed longitudinally along the surface of the dielectric substrate structure between the pair of ground strip conductors;

a dielectric disposed over the signal strip conductor and the pair of ground strip conductors;

an electrically conductive shield member, disposed over the dielectric, comprising: a plurality of first portions spaced one from another longitudinally over the surface of the dielectric substrate structure, each one of the plurality of first portions having: a first end on, and in direct contact with, upper surfaces of a first one of the pair of ground strip conductors; a second end on, and in direct contact with, upper surfaces of a second one of the pair of ground strip conductors; and a bridging portion connected between the first end and the second end, the bridging portion being disposed over an underling portion of the signal strip conductor; and a second portion disposed between, and dielectrically separated by the dielectric from, the pair of ground strip conductors, the second portion being disposed longitudinally over, parallel to, and dielectrically separated by the dielectric from, the signal strip conductor, and the second portion being connected

to the bridging portion of each one of the plurality of first portions of the electrically conductive shield member.

23. The microwave transmission line structure recited in claim 22 wherein the plurality of first portions are wider than the second portion.

24. The microwave transmission line structure recited in claim 22 wherein the underlying portion of the signal strip conductor is narrower than portions of the signal strip conductor that are not under-lying the bridging portion.

25. The microwave transmission line structure recited in claim 24 wherein the microwave transmission line structure has the same predetermined input impedance longitudinally along the surface of the substrate.

26. The microwave transmission line structure recited in claim 22 wherein the first strip conductor portion is narrower than the second strip conductor portion.