



Infineon BGT24LTR11N16 24Ghz Radar MMIC Impedance Matching

-The Technical Details behind the Official Evaluation Board-

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Part I: Matching Structures of Official Evaluation Board

The Matching Structures of BGT24LTR11N16 were mentioned in the application note AN472[1]. However AN472 just provided the Matching Structures based on the RO4350B substrate (Figure 1) without necessary technical details about the design process. Thus, it could be confused to port the Matching Structures to the substrates other than RO4350B. As a result, the technical details behind the Matching Structures will be discussed in this paper.

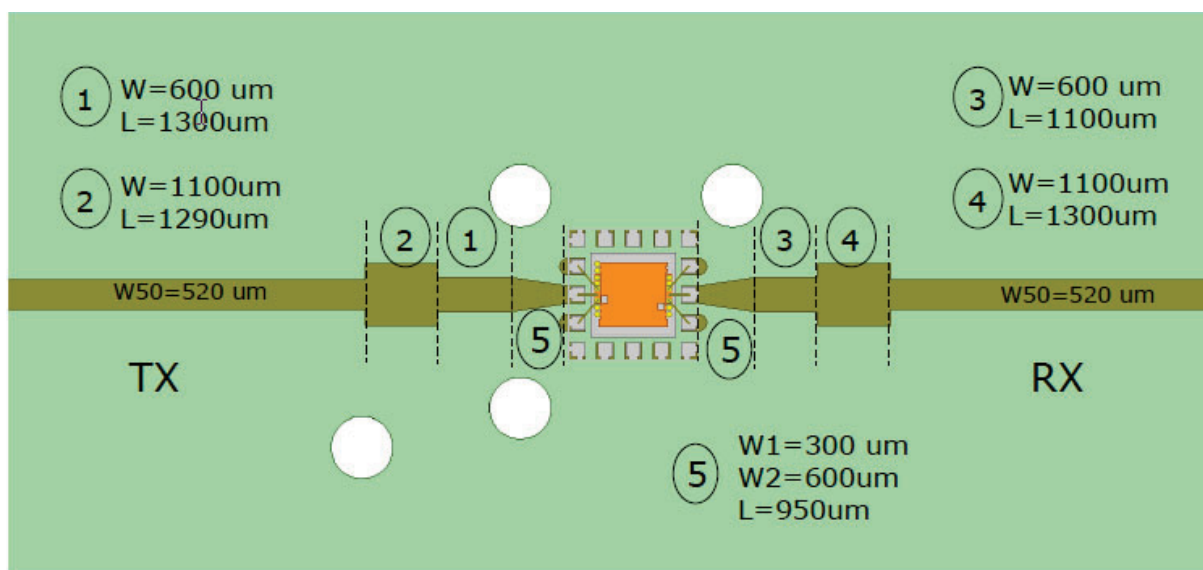


Figure 1: Matching structures to be used on a RO4350B substrate with a thickness of 0.254 mm

Only the RX side of the Matching Structures will be discussed in this article due to the similarity between the TX and RX.

Part II: “Reverse Engineering” of the RX Matching Structures

1. The RX Impedance of MMIC