

Title (en)
MINIATURE MICROWAVE COMPONENT FOR SURFACE-MOUNTING

Title (de)
MINIATURMIKROWELLENKOMPONENTE FÜR OBERFLÄCHENMONTAGE

Title (fr)
COMPOSANT MINIATURE HYPERFREQUENCES POUR MONTAGE EN SURFACE

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Application
EP 10714320 A 20100422

Priority
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Abstract (en)
[origin: WO2010127949A1] The invention relates to a miniature microwave component, comprising: an MMIC microwave chip (100) encapsulated in an individual housing (222) for surface-mounting capable of operating at a frequency F0 much higher than 45 GHz; at least one contactless microwave access (124), by electromagnetic coupling, ensuring the transmission of coupling signals at a operating frequency F0. The component comprises a passive multilayer integrated circuit (220) having metallized layers and layers made of a dielectric material (140, 142, 144), a top surface (224), a metallized bottom surface (225), the metallized bottom surface comprising, on the side of the contactless microwave access (124), an opening (236) in the metallization through which electromagnetic waves can pass for coupling by the contactless microwave access and, between two layers of dielectric material, a metallized layer (146) having at least one electromagnetic coupling electric conductor (148) connected to the electronic components of the chip (100), said coupling electric conductor (148) being located next to the contactless microwave access (124) in order to ensure the transmission of microwave signals by electromagnetic coupling at the operating frequency F0. The invention can be used in automobile radars and high-bandwidth communications.

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Citation (search report)
See references of WO 2010127949A1

Citation (examination)
• EP 0920071 A2 19990602 - TRW INC [US]
• US 2008297283 A1 20081204 - BYUN WOO-JIN [KR], et al

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