Abstracts

MMIC Transmitter for a Commercial Search and Rescue Radar Transponder

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This paper reports the design and use of MMIC's in the transmitter of a commercial Search and Rescue Transponder (SART). The SART is a maritime unit operating in the frequency band 9.2-9.5 GHz. The microwave unit is integrated on a single thick film hybrid, using an optimum combination of MMIC's and discrete components. This has resulted in a highly reliable, cost-effective product. There are two MMIC's, namely the VCO and the power amplifier. The VCO MMIC has a typical linearity of better than 5-MHz deviation over a 300-MHz sweep. The power amplifier MMIC has a minimum power output of 27-dBm over the band.

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