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标题: D-Band Micromachined Silicon Rectangular Waveguide Filter

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摘要: The 140 GHz silicon micromachined bandpass rectangular waveguide filters are firstly fabricated by the deep reactive ion etching (DRIE) processes for submillimeter wave applications. The filter circuit structure is once-formed using the ICP reactive ion etcher to etch through the full thickness of the silicon wafer, and then bonded together with the two metallized glass covers to form the waveguide cavity. The measured lowest insertion losses are lower than 0.5 dB. The unloaded quality factor can reach 160. It demonstrates a successful and practical way to fabricate these types of waveguide filters.

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