

## 3D multilayer monolithic microwave (M/sup 3/) passive transmitter module

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*A.M. Ferendeci, Bosui Liu, Ho Huang, M. Mah and Lee Liou. "3D multilayer monolithic microwave (M/sup 3/) passive transmitter module." 1999 MTT-S International Microwave Symposium Digest 99.2 (1999 Vol. II [MWSYM]): 445-448 vol.2.*

An X-band multilayer monolithic microwave (M/sup 3/) filter and patch antenna were designed, processed and characterized to demonstrate a three dimensional X-band passive transmitter. Multiple layers of polyimide and metal were deposited on a metalized silicon wafer. A filter and a patch antenna which were processed at two different layers were coupled through a slot on a common ground plane. The X-band 3D-M/sup 3/ passive transmitter was characterized for the radiation patterns.

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