Abstracts

Transparent wave absorber using resistive thin film at V-band frequency

K. Takizawa and O. Hashimoto. "Transparent wave absorber using resistive thin film at V-band frequency." 1999 Transactions on Microwave Theory and Techniques 47.7 (Jul. 1999, Part I [T-MTT]): 1137-1141.

We present a realization of a transparent wave absorber effective for use at V-band frequency. First, we propose a structure of the transparent wave absorber consisting of spacer (polycarbonate) and two transparent resistive sheets (polyethylene-terephthalate deposited with indium-tin-oxide) used as reflection and absorption films. Second, a design chart for this type of wave absorber is shown. Third, a design method and manufacturing process of the transparent wave absorber are described, particularly for V-band frequency. As a result, the measurement of reflection loss of the absorber indicates that a peak absorption of 32-38 dB is attained at a target frequency of 60 GHz.

❑ Return to main document.