

CHARACTERISTICS OF CVD DIAMOND WINDOWS ON 1 MW GYROTRONS*

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Infrared and Raman scattering measurements have been made characterizing several artificially grown diamond gyrotron windows. The windows achieve thermal equilibrium 150° above baseline about 3 s after initiation of 700 kW rf pulses, with isolated hot spots up to 20°C higher. Raman scattering was used to characterize graphite deposits.

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