

On the Dynamic Dielectric Behaviour of $(\text{CH}_3\text{NH}_3)_3\text{Sb}_2\text{Br}_9$ (MABA)

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The complex electric permittivity of ferroelectric $(\text{CH}_3\text{NH}_3)_3\text{Sb}_2\text{Br}_9$ (MABA) single crystals has been measured in the frequency range 1 kHz – 3 GHz between 15 and 300 K. The dynamic dielectric behaviour of MABA is determined by the properties of high frequency relaxation of Cole-Cole type. It is thermally activated and characterised by a relatively small activation energy. The phase transitions at 168 and 134 K influence the amplitude of the relaxation ($\Delta\epsilon$) without any important changes in the relaxation frequency.

Key words: Dielectric Response; Phase Transitions; Ferroelectrics.