

## Plasma maser with magnetic self-insulation

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***The first plasma maser operated as a magnetically insulated transmission line oscillator (MILO) was created. A generator with the impedance of 33 Ohm was used to form single, 3 ns long pulses with the peak voltage of 550 kV. So short pulses determined the maser operation regime, namely, UWB noise amplification in the range of 0.6 to 5 GHz. The top measured wave electric field corresponded to the emission power above 500 MW.***

*Keywords:* plasma maser, MILO, magnetic self-insulation, ultra-wide band (UWB), noise amplification.

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