



Oscillator with electrical frequency tuning in 26.0–37.5 GHz frequency range



FEATURES

- *High rate of frequency tuning*
- *Higher power*
- *Low level of power change*
- *Low level of AM-, FM-noise*

APPLICATION

Microwave oscillator with electrical frequency tuning, **M311010** module, is designed for application:

- in various devices with phase lock;
- in radar systems of precise measurement of distance and level of liquid and bulk solids materials;
- in equipment intended for wireless data transmission.

DESCRIPTION

Oscillator, **M311010** module, is made on GaAs Gunn diode which produced at Scientific Research Institute "Orion". Gunn diode and varactor are set into a cavity which operates on E₀₁₀ mode.

The oscillator is made with output waveguide section of 7.2x3.4 mm, type of connecting waveguide flanges is according to ГOCT 13317-89.

There is an isolator at the oscillator output.



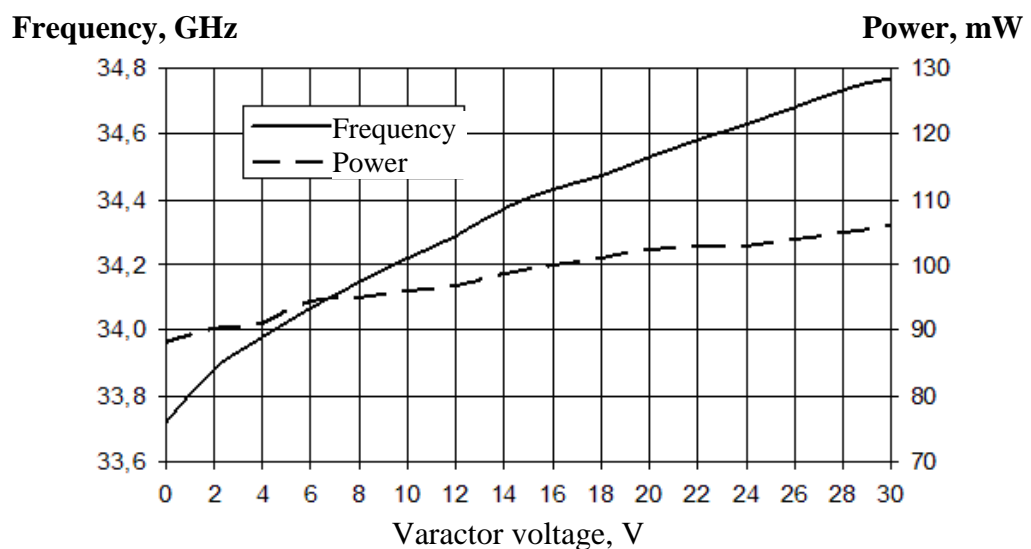
SPECIFICATIONS

Operating frequencies*, GHz	26.0–37.5
Range of electrical frequency tuning, GHz	0.7...1.0
Output power, mW, no less	80
Control voltage, V	0–30
Spectral power density at 10 kHz offset from carrier, dB/Hz:	
• AM noise	-145
• FM noise	-80
Maximal operating voltage, V	6.0
Power consumption, W, no more	5.0
Temperature range, °C	-50...50
Weight, g, no more	230
Overall dimensions (LxWxH), mm	37x48x35

*Initial operating frequency within stated range is chosen by a customer.

CHARACTERISTICS

Tuning characteristics of M311010 oscillator





OVERALL DIMENSIONS DRAWING

