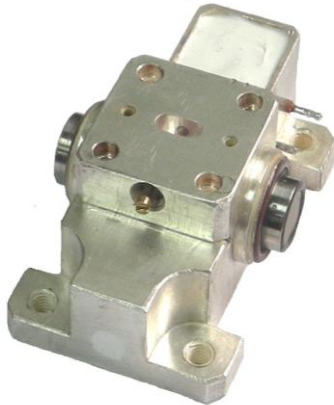




## Low noise high stable oscillator in 25.86–38.0 GHz frequency range



### FEATURES

- *Low level of AM and FM noise*
- *Low level of spurious oscillations*
- *Hermetically sealed design*

### APPLICATION

Low noise high stable oscillator, **M311009** module, is intended for use as a heterodyne of receiving devices and as a driver in structure of transceiving devices of 8-mm wave lengths of various purposes.

### DESCRIPTION

Oscillators of this model are built according to a scheme of passive frequency stabilization with high quality sealed made of invar resonator that provides high stability of operating frequency and reliable operation of the oscillator under adverse exterior factors.

GaAs Gunn diodes serve as an active device. The diodes are designed and produced on a base of technological line of Scientific Research Institute "Orion".

The oscillators are made with output waveguide section of 7.2x3.4 mm, type of connecting waveguide flanges according to ГOCT 13317-89 or UG-388/U.



#### **SPECIFICATIONS**

|   |            |
|---|------------|
| Operating frequencies*, GHz                                 | 25.86–38.0 |
| Output power, mW, not less                                  | 50         |
| Temperature coefficient of frequency, MHz/°C, no more       | 0.08       |
| Temperature coefficient of power, dB/°C                     | 0.025      |
| Level of spurious oscillations, dB                          | -80        |
| Spectral power density at 10 kHz offset from carrier, dB/Hz |            |
| – AM noise  | -145       |
| – FM noise  | -100       |
| Voltage supply, V, no more                                  | 6          |
| Power consumption, W, no more                               | 6          |
| Temperature range, °C                                       | -50...50   |
| Weight, g   | 200        |
| Overall dimensions , mm                                     | 63x39x24   |
| VSWR of load, no more                                       | 1.5        |

\*Fixed operating frequency within stated range is chosen by a customer

#### **OVERALL DIMENSIONS DRAWING**

