

GIL-42-24-B 10

K-Band Mechanically Tuned Gunn Oscillator, 24.125 GHz

Description:

Model GIL-42-24-B-10 is a K-Band, mechanically tuned Gunn oscillator that utilizes a high performance GaAs Gunn diode and proprietary cavity design to deliver 10.0 dBm typical power with low AM/FM noise and harmonic emissions. The oscillator has a center frequency of 24.125 GHz and a mechanical tuning range of ± 0.25 GHz. Compared to its multiplier-based counterparts, the Gunn oscillator is a lower cost alternative and a cleaner source.

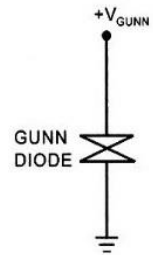


Features:

- Low AM/FM Noise and Harmonics
- Mechanical Tuning Bandwidth
- Friction locked tuning screw

Applications:

- Test Sources
- Signal Generation
- Lab Test Setups



Electrical Specifications:

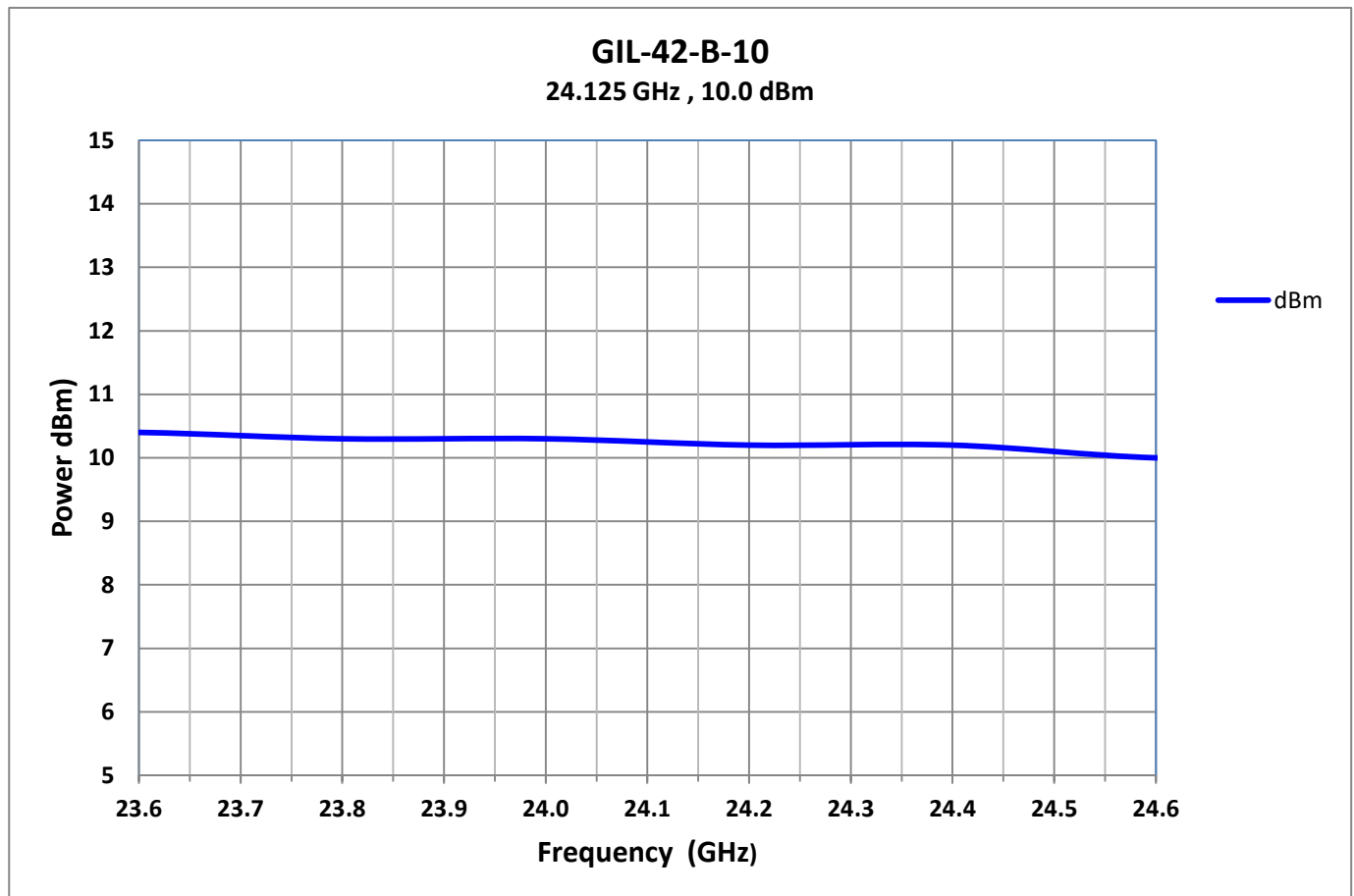
Parameter	Minimum	Typical	Maximum
Center Frequency		24.125 GHz	
Mechanical Tuning Range		± 0.25 GHz	
Output Power	+9.0 dBm	+10.0 dBm	
Bias Voltage		+5.5 V _{DC}	+6.5 V _{DC}
Bias Current		300 mA	
Specification Temperature		+30 °C	
Case Temperature	+10 °C		+60 °C

Mechanical Specifications:

Item	Specification
RF Port	WR-42 Waveguide with UG-595/U Flange
Bias Port	Gunn is solder terminal
Case Material	Aluminum
Finish	Natural
Weight	22 g
Size	25 (W) X 20 (L) x 25 (H) mm
Outline	TBC

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Note:

- All data presented is collected from a sample lot. It is for illustration only. Actual data varies unit to unit.
- The data given above was tested under case temperature **+30 °C**.
- Always set tuning screw to around **24.125 GHz** when turning on the oscillator to ensure correct mode operation.
- Reserves the right to change the information presented without notice.

Caution:

- Reversing polarity will destroy the device.
- Bias voltage should not exceed **+ 6.5 Volts**.
- The case temperature of the device should not exceed **+60 °C**. Use an additional heatsink or fan if necessary

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Mechanical Outline: (Unless otherwise specified, all dimensions are in millimeters)

To be confirmed