www.linwave.co.uk

Gunn Oscillator Module Fc 81.25 GHz ± 100 MHz Pout 50-80 mW.

Description

Linwave Technology offer a range of Gunn Oscillator modules from 30 GHz to 110 GHz which can be customised to meet specific requirements.

Figure 1. Narrow Band Gunn Oscillator module

Parameter	Value	Comments
Model	LW22-793604	Narrow band
Centre Frequency	81.25 GHz	Typ.
Waveguide	WR10 / 12	
RF Output Interface	UG-387/U	Compatible
Output Power	50 mW	50-80 mW Typ. Available
Bandwidth	± 100 MHz	Typ.
Gunn Voltage (Nom)	+5.5 V	Abs. Max +5.8 V
Gunn Current	870 mA	Typ.
Nominal Operating Temp.	32 Degs C	

For price, delivery and to place orders please contact
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Data sheet Iss 01, dated 04/12/18 DS00793604-, SAP Activity No. 3761

Operating Instructions

The oscillator unit is a precision part, but careful usage should ensure a long service life. Before use it is recommended to bear in mind the following points:

- Observe standard ESD precautions.
- Connect the power supply leads to the appropriate Gunn terminals. To avoid turn on transients we recommend that the bias leads be connected to a power supply that has previously been turned on and set to zero voltage.
- To power up the oscillator, slowly and continuously increase the supply voltage to the value specified value (Vg= + x.y V). To power down the oscillator reverse the above process.

  A table of results is provided below; it indicates the frequency variation with bias voltage Vg.

  Operation outside the range indicated in the results table is NOT recommended or in any way guaranteed
- If the frequency is varied outside the specified range mode changes may occur. The oscillator may then be returned to its normal operation by powering down and then powering up the oscillator once again.
- A cooling fan or heatsink is recommended to maintain an optimum operating temperature.
- A stable thermal environment will enhance frequency stability, preferably within ± 3 Degs C to keep within the results for the unit.

Note: Purpose built PSUs are available for this product.

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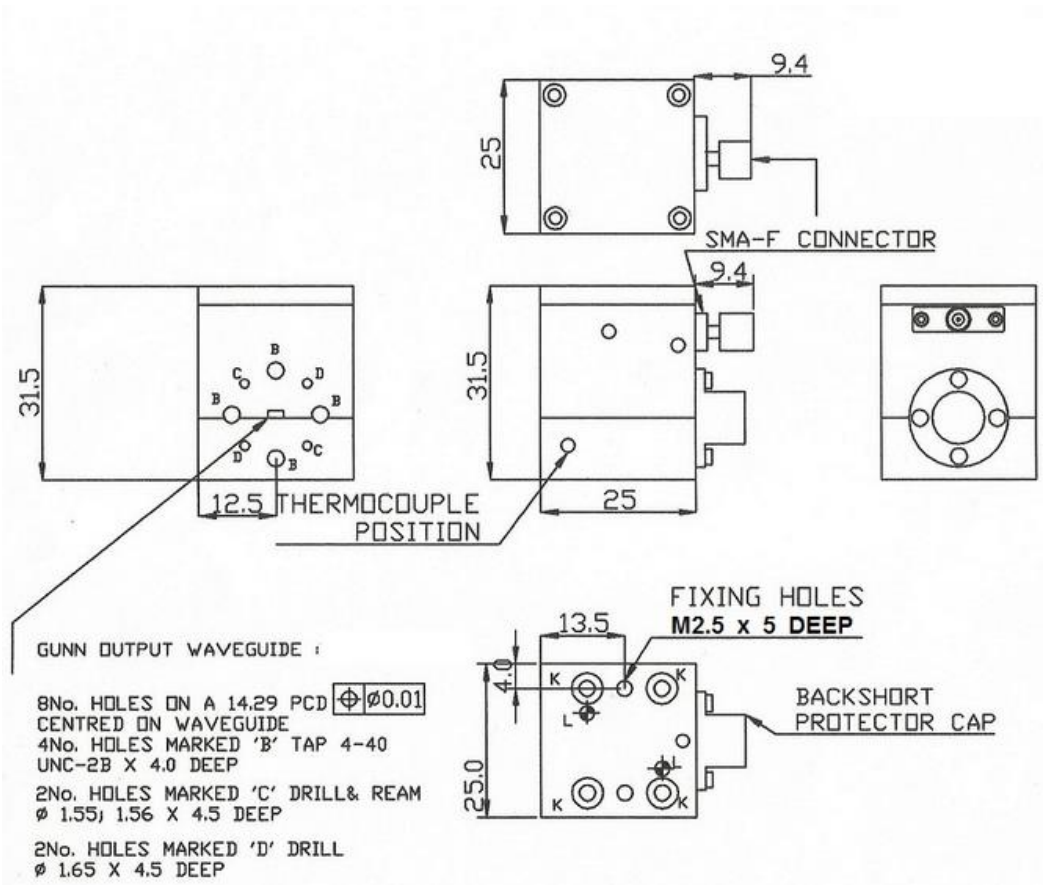
Table of Typical Oscillator Performance Parameters (For indication only).

Room temperature (heatsink mounted)

Vg	Current	Frequency	Output Power	
volts	mA	GHz	dBm	mW
5.3	861	81.118	16.93	48.2
5.4	860	81.173	16.98	49.4
5.5	858	81.226	16.98	49.4
5.6	856	81.285	16.92	49.4
5.7	854	81.328	16.82	45.6
5.8	852	81.378	16.66	41.8

Mechanical Outline



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