

MAIN FEATURES

- ❖ Fixed 4.27GHz output frequency
- ❖ Very low phase noise
- ❖ Very low spurious level
- ❖ Two equivalent RF outputs
- ❖ Internal reference
- ❖ Can be synchronized to external reference



DESCRIPTION

The BOVI63 is a high performance phase locked oscillator with very low phase noise and spurious level, making them ideal for use as a stable frequency source in communications, navigation, surveillance, or test and measurement system. The BOVI63 has fixed output frequency. The BOVI63 contains a low phase noise reference, that can be synchronized to an external 10MHz signal in case higher frequency accuracy is required. The BOVI63 has two RF outputs with high isolation between them, that can be used as two equivalent ports or as one main and one monitor port. Both outputs can be muted within 10us with a TTL control signal.

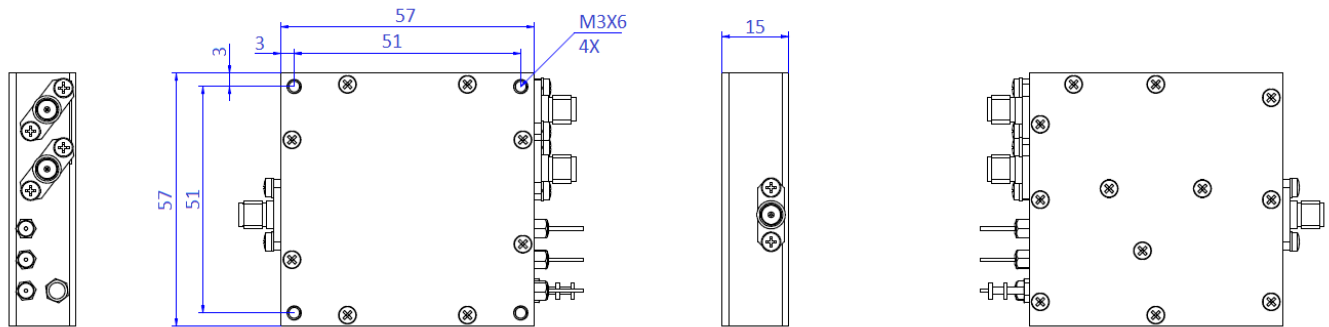
SPECIFICATIONS

Operating frequency	Fixed 4.27GHz
Number of outputs	2
Output power (RFOUT1&RFOUT2)	+15dBm typ., ≥+13dBm in full operating temp. range
Output VSWR	≤1.5:1
Isolation between outputs	≥20dB
Internal reference accuracy	≤±0.5ppm @ +25°C
Internal reference stability	≤±0.5ppm over temperature
Aging	≤±1.5ppm in first year and ≤±5ppm for 10 years
Harmonics	-50dBc typ., ≤-40dBc
Spurious	-90dBc typ., ≤-80dBc
SSB phase noise [dBc/Hz]	-80dBc/Hz typ., ≤-77@100Hz
	-98dBc/Hz typ., ≤-95@1kHz
	-110dBc/Hz typ., ≤-107@10kHz
	-110dBc/Hz typ., ≤-107@100kHz
Noise floor	-120dBc/Hz typ., ≤-117@1MHz
	≤-160dBc/Hz

Phase lock alarm	Logic signal on feedthrough capacitor TTL "H" in lock, TTL "L" in unlock
RF output switch	Logic signal on feedthrough capacitor TTL "H" is RF ON, TTL "L" is RF OFF
RF output switching time	≤ 10us
RF ON/OFF ratio	≥ 35dB
External reference frequency	10MHz ± 10ppm (automatic switchover)
External reference level	-6...+10dBm
Supply voltage	+12V nominal (+11V...+28V)
Current consumption	200mA typ., @+12V
Operating temperature range	-40°C to +70°C
Storage temperature range:	-40°C to +85°C
RF connectors (RFOUT1&2, EXTREF)	SMA Female
Supply voltage connector (VCC)	Feedthrough capacitor
Phase lock alarm connector (LOCK)	Feedthrough capacitor
RF ON/OFF switch connector (ON/OFF)	Feedthrough capacitor
GND	Solder pin
Dimensions (excluding connectors)	57x57x15mm

Specifications are subject to change without notice.

OUTLINE DRAWING (mm)





BOVI63 Low Phase Noise PLO With Internal Reference

ORDERING INFORMATION

MODEL NUMBER	DESCRIPTION
BOVI63K11396	BOVI63 4.27 GHz PLO; dual RF output; 15 dBm output level; TTL lock; mute

DOCUMENT REVISION

DOCUMENT NAME	REVISION	DATE
BOVI63-LM-K11396	V01	2023/10/02