

MAIN FEATURES

- ❖ 16 GHz output frequency
- ❖ +17 dBm typical output power
- ❖ Very low phase noise
- ❖ Very low spurious level
- ❖ Built-in high stability frequency reference
- ❖ Compact size



DESCRIPTION

The BOVI57 is a high performance frequency synthesizer intended for use in professional applications, where excellent phase noise, low spurious level, compact size and wide operating temperature range are important factors. This signal source can be used in telecommunications, satellite communications, military applications and laboratory testing. The BOVI57 has low output level variation over temperature.

SPECIFICATIONS

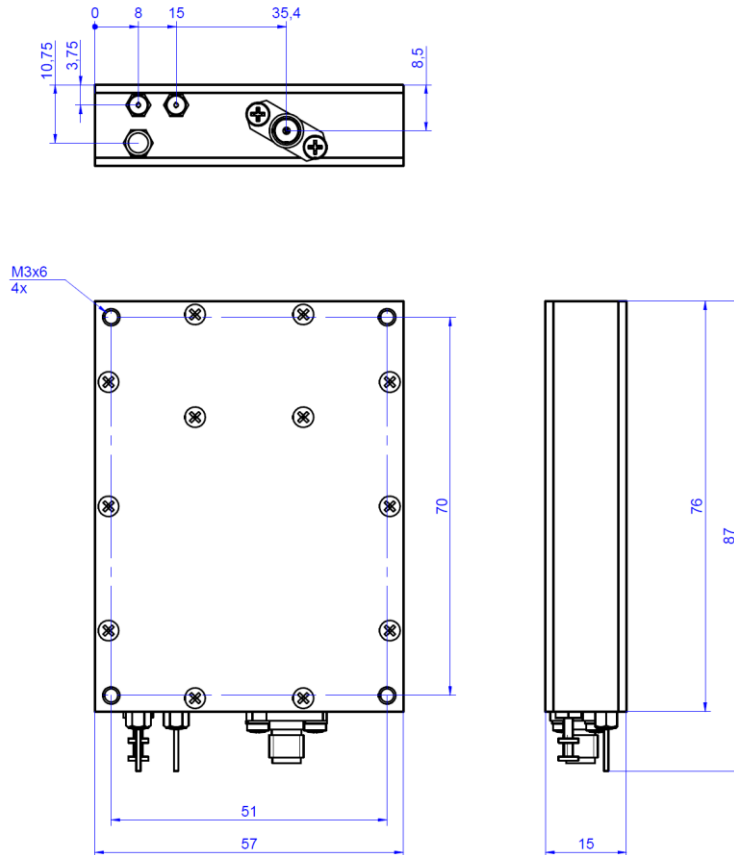
RF PARAMETERS		
Output frequency	16000 MHz	
Frequency accuracy	$\leq \pm 0.5 \text{ ppm @ } +25^\circ\text{C}$	
Frequency stability	$\leq \pm 0.3 \text{ ppm within temperature range}$	
Frequency drift / day	$\leq \pm 0.05 \text{ ppm / day at constant temperature}$	
Frequency aging	$\leq \pm 1.5 \text{ ppm in first year and } \leq \pm 5 \text{ ppm for 10 years}$	
RF output impedance	50 Ω	
RF output VSWR	$\leq 1.5:1$	
RF output power	$\geq +15 \text{ dBm in full operating temp. range (+17 dBm typ.)}$	
Spurious	-80dBc typically, $\leq -70 \text{ dBc}$	
Subharmonics	-60dBc typically, $\leq -50 \text{ dBc}$	
Harmonics	-40dBc typically, $\leq -30 \text{ dBc}$	
SSB phase noise	@ 100 Hz	-72dBc/Hz typ., $\leq -66 @ 100 \text{ Hz}$
	@ 1 kHz	-95dBc/Hz typ., $\leq -89 @ 1 \text{ kHz}$
	@ 10 kHz	-104dBc/Hz typ., $\leq -98 @ 10 \text{ kHz}$
	@ 100 kHz	-110dBc/Hz typ., $\leq -105 @ 100 \text{ kHz}$
	@ 1 MHz	-135dBc/Hz typ., $\leq -129 @ 1 \text{ MHz}$
Alarm signal	TTL level, "High" in LOCK, "Low" in UNLOCK	
Power supply voltage	+12V \pm 1V DC	
Current consumption	280mA typically, 320mA max. @ +12V DC	
MECHANICAL PARAMETERS		
Dimensions	57 mm x 70 mm x 15 mm (excluding connectors)	
Surface finish	Nickel plating	
RF output connector	SMA-type female	
Alarm connector	Feed through capacitor	
Power connector	Feed through capacitor	
GND	Solder terminal	

ENVIRONMENTAL PARAMETERS

Operating temperature range	- 20 °C ... + 60°C
Storage temperature range	- 40 °C ... + 80°C
Relative humidity	≤95 % (non-condensing)

Specifications are subject to change without notice.

OUTLINE DRAWING (mm)



ORDERING INFORMATION

MODEL NUMBER	DESCRIPTION
BOVI57K10728	BOVI57 Ku-band, 16000 MHz, low noise PLO with int. ref.

DOCUMENT REVISION

DOCUMENT NAME	REVISION	DATE
BOVI57-LM-K10728	V01	2023-03-30