
S-BAND FREQUENCY SYNTHESIZER

- **LOW PHASE NOISE**
- **EASY PROGRAMMING**
- **NON VOLATILE MEMORY**
- **SMALL DESIGN**

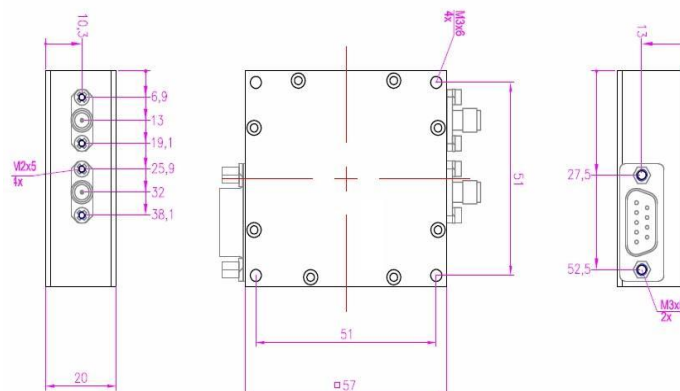
This synthesizer is intended for use in professional applications as programmable local oscillator, where clean output signal, high resistance against shocks and vibrations, small size, easy handling and modest price are important factors. Main applications are in satellite and telecommunications systems, instrumentation.

Electrical characteristics:

Frequency Range	3400 MHz (+/-50 MHz)
Frequency Step	10 MHz
Output Power	+ 10 dBm
External Reference Frequency	10 MHz
External Reference Level	TTL
Harmonics	-25 dBc typ. (max. -20 dBc)
Spurious	-65 dBc typ. (max. -58 dBc)
*Phase Noise (dBc/Hz)	
@100Hz	-83 dBc/Hz typ. (max. -81 dBc/Hz)
@1kHz	-92 dBc/Hz typ. (max. -90 dBc/Hz)
@10kHz	-93 dBc/Hz typ. (max. -91 dBc/Hz)
Operating temperature range	-20 to 60°C
Power Supply	+12 V DC / 80mA typ. (100 mA max.)
Phase Lock Alarm	TTL "H" in Lock, TTL "L" in Unlock
Connectors: RF Output	SMA female / 50 ohm
REF IN	SMA female / 50 ohm
Supply & Control	D-SUB p pole, plug
Frequency Control	TTL parallel 4 bits (valid 0000-1010)
Default Frequency	Previous Locked Frequency (if code is invalid)
Mechanical size	57 x 57 x 20 mm

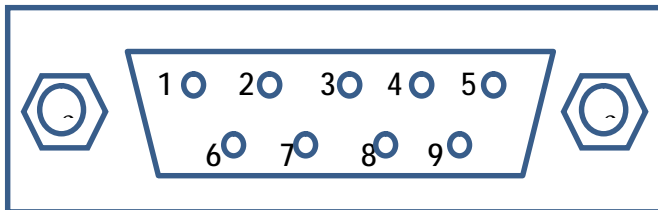
Specifications are subject to change without notice

* If the reference oscillator is Vectron C4600 or similar. If the reference phase noise is worse, then output phase noise is equal to ref.noise plus 51dB

Outline dimensions (mm):


Connectors and pin assignment:

DSUB-9 male connector on the box
Front view


Pin assignment:

Pin1 Data bit, D0 (LSB)
 Pin2 Data bit, D1
 Pin3 Data bit, D2
 Pin4 Data bit, D3 (MSB)
 Pin5 GND
 Pin6 LOCK
 Pin7 NC (No connection)
 Pin8 GND
 Pin9 +12V

Frequency Control Code

Frequency of selection (MHz)	Pin4 (MSB)	Pin3	Pin2	Pin1 (LSB)
3350	0	0	0	0
3360	0	0	0	1
3370	0	0	1	0
3380	0	0	1	1
3390	0	1	0	0
3400	0	1	0	1
3410	0	1	1	0
3420	0	1	1	1
3430	1	0	0	0
3440	1	0	0	1
3450	1	0	1	0
Previous valid frequency	1	0	1	1
	1	1	0	0
	1	1	0	1
	1	1	1	0
	1	1	1	1



BSVS23

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Picture:

