

- Frequency range 0.625MHz to 50.0MHz
- CMOS/TTL Output
- Supply Voltage 5.0 V or 3.3 VDC
- Integrated Phase Jitter 1ps typical
- Low cost unit

DESCRIPTION

G62 VCXOs, are packaged in a miniature 11.4mm x 9.6mm x 2.5mm 6 pad SMD package. Typical phase jitter for G series VCXOs is <1ps, output CMOS/TTL. G series VCXOs use fundamental mode crystal oscillators. Applications include phase lock loop, SONET/ATM, set-top boxes, MPEG, audio/video modulation, video game consoles and HDTV.

SPECIFICATION

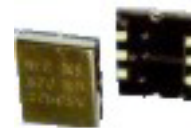
Frequency Range	
Vdd = +3.3VDC:	0.625MHz to 50.0MHz
Vdd = +5.0VDC:	1.0MHz to 50.0MHz
Supply Voltage:	+3.3 VDC $\pm 5\%$ or +5.0VDC $\pm 5\%$
Output Logic:	TTL/HCMOS
Integrated Phase Jitter:	1.0ps maximum 12kHz to 20MHz
Period Jitter RMS:	2.0ps typical
Period Jitter Peak to Peak:	14ps maximum
Phase Noise:	See table below
Initial Frequency Accuracy	
Tune to the nominal frequency with:	
+3.3VDC:	Vc = 1.65V ± 0.2 V
+5.0 VDC:	Vc = 2.5V ± 0.2 V
Output Voltage HIGH (1):	90% Vdd minimum
Output Voltage LOW (0):	10% Vdd maximum
Control Voltage Centre	
+3.3VDC:	1.65V
+5.0VDC:	2.5V
Control Voltage Range	
+3.3VDC:	0.3V to 3.0V
+5.0VDC:	0.5V to 4.5V
Pulling Range	
+3.3VDC	± 80 ppm to ± 120 ppm (standard)
+5.0VDC:	± 80 ppm to ± 150 ppm (± 200 ppm available)
Temperature Stability:	See table
Output Load:	CMOS = 15pF, TTL = 2 gates
Start-up Time:	10ms maximum, 5ms typical
Duty Cycle:	50% $\pm 5\%$ measured at 50% Vdd
Rise/Fall Times:	0.7ns typical (15pF load)
Current Consumption:	10 to 45mA, frequency dependent
Linearity:	10% maximum, 6% typical
Modulation Bandwidth:	10kHz minimum
Input Impedance:	1 M Ω minimum
Slope Polarity:	Monotonic and Positive. (An increase of control voltage always increases output frequency.)
Storage Temperature:	-50° to +100°C
Ageing:	± 5 ppm per year maximum
RoHS Status:	Fully compliant

FREQUENCY STABILITY

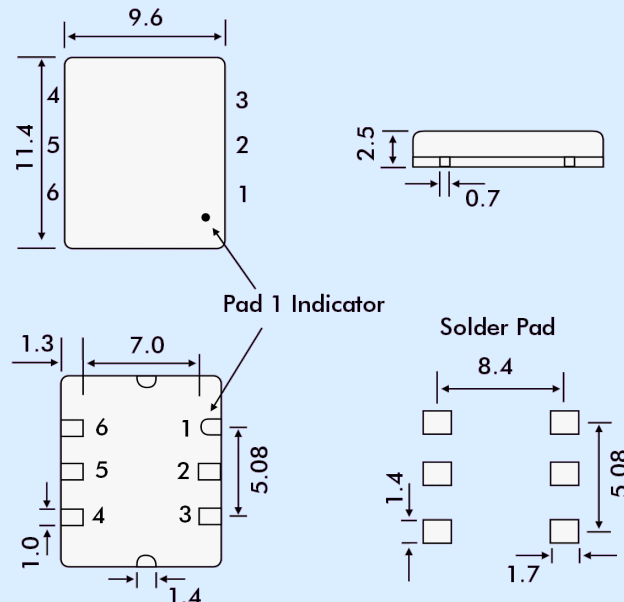
Stability Code	Stability $\pm$ ppm	Temp. Range
A	25	0°~+70°C
B	50	0°~+70°C
C	100	0°~+70°C
D	25	-40°~+85°C
E	50	-40°~+85°C
F	100	-40°~+85°C

If non-standard frequency stability is required
Use 'I' followed by stability, i.e. I20 for ± 20 ppm

11.4 x 9.6 x 2.5mm 6 pad SMD



OUTLINE & DIMENSIONS



Pad Connections

- 1 Voltage Control (rounded pad)
- 2 Tri-state*
- 3 Ground
- 4 Output
- 5 Tristate*
- 6 Supply Voltage

*Pads 2 and 5 are connected internally

PHASE NOISE

Offset	Frequency 27.0MHz
10Hz	-70dBc/Hz
100Hz	-105dBc/Hz
1kHz	-132dBc/Hz
10kHz	-142dBc/Hz
1MHz	-150dBc/Hz

PART NUMBERING

Example: 3 G62 B-80N-27.000

