

- Frequency range 50.01MHz to 200MHz (15pF load)
- Frequency range 50.01MHz to 320MHz (10pF load)
- LVCMOS Output
- Supply Voltage 3.3 VDC
- Ultra low jitter less than 1ps

## DESCRIPTION

GF64 VCXOs, are packaged in an industry-standard, 6 pad, 11.4mm x 9.6mm x 4.7mm SMD package. GF64 VCXOs provide excellent phase jitter performance, less than 1ps.

## SPECIFICATION

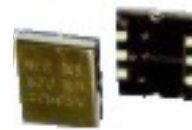
Frequency Range	
Load 15pF:	50.01MHz to 200.0MHz
Load 10pF:	50.01MHz to 320.0MHz
Supply Voltage:	3.3 VDC $\pm$ 5%
Output Logic:	LVCMOS
Integrated Phase Jitter:	0.4ps typical, 0.5ps maximum (for 155.250MHz)
Period Jitter RMS:	3.0ps typical (for 155.250MHz)
Period Jitter Peak to peak:	20ps typical (for 155.250MHz)
Phase Noise:	See table below
Initial Frequency Accuracy:	Tune to the nominal frequency with $V_c = 1.65 \pm 0.2VDC$
Output Voltage HIGH (1):	90% Vdd minimum
Output Voltage LOW (0):	10% Vdd maximum
Pulling Range:	From $\pm 30ppm$ to $\pm 150ppm$
Temperature Stability:	See table
Output Load:	15pF
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	
<100MHz:	30mA maximum (15pF load)
>100MHz:	40mA maximum (15pF load)
Linearity:	10% maximum, 6% typical
Modulation Bandwidth:	25kHz minimum
Input Impedance:	60k $\Omega$ minimum
Slope Polarity: (Transfer function)	Monotonic and Positive. (An increase of control voltage always increases output frequency.)
Storage Temperature:	-50° to +100°C
Ageing:	$\pm 5ppm$ per year maximum
Enable/Disable (Tristate):	Pad 2, Enable high or 70% Vdd min. applied to Tri-state pad to enable output. 30% Vdd max. to disable output (high impedance)
RoHS Status:	Fully compliant

## FREQUENCY STABILITY

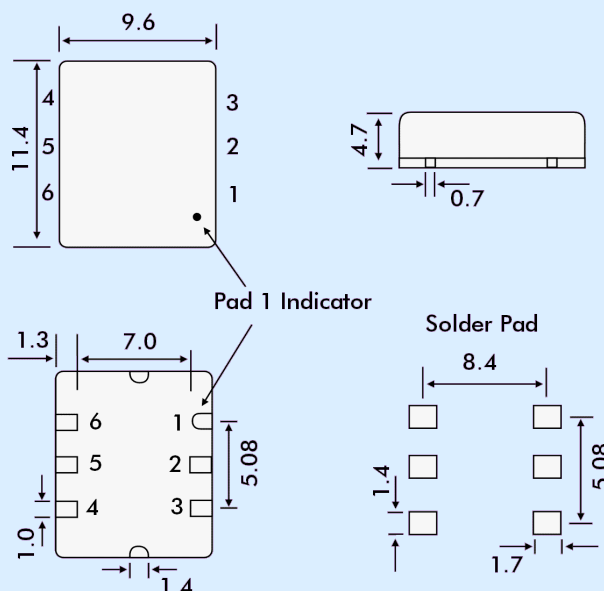
Stability Code	Stability $\pm ppm$	Temp. Range
A	25	0°~+70°C
B	50	0°~+70°C
C	100	0°~+70°C
D	25	-40°~+85°C
E	50	-40°~+85°C
F	100	-40°~+85°C

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

## 11.4 x 9.6 x 4.7mm 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 155.25MHz
10Hz	-62dBc/Hz
100Hz	-92dBc/Hz
1kHz	-120dBc/Hz
10kHz	-132dBc/Hz
100kHz	-128dBc/Hz
1MHz	-140dBc/Hz
10MHz	-150dBc/Hz

## PART NUMBER SCHEDULE

Example: **3GF64B-80N-156.25**

