

- Frequency range 38MHz to 640MHz
- LVDS Output
- Supply Voltage 3.3 VDC
- Phase jitter 0.4ps typical
- Pull range from  $\pm 30\text{ppm}$  to  $\pm 150\text{ppm}$

### DESCRIPTION

GDF14 VCXOs are packaged in an industry-standard 14 pin dual-in-line package. Typical phase jitter for GDF series VCXOs is 0.4 ps. Output is LVDS. Applications include phase lock loop, SONET/ATM, set-top boxes, MPEG, audio/video modulation, video game consoles and HDTV.

### SPECIFICATION

Frequency Range:	38.0MHz to 640.0MHz
Supply Voltage:	3.3 VDC $\pm 5\%$
Output Logic:	LVDS
RMS Period Jitter:	3.0ps typical
Peak to Peak Jitter:	20.0ps typical, 30.0ps maximum
Phase Jitter:	0.4ps typical, 5.0ps maximum
Initial Frequency Accuracy:	Tune to the nominal frequency with $V_c = 1.65 \pm 0.2\text{VDC}$
Output Voltage HIGH (1):	1.4 Volts typical
Output Voltage LOW (0):	1.1 Volts typical
Pulling Range:	From $\pm 30\text{ppm}$ to $\pm 150\text{ppm}$
Control Voltage Range:	$1.65 \pm 1.35$ Volts
Temperature Stability:	See table
Output Load:	$50\Omega$ into Vdd or Thevenin equiv.
Rise/Fall Times:	0.5ns typ., 0.7ns max.
Duty Cycle:	20% Vdd to 80% Vdd 50% $\pm 5\%$ (Measured at Vdd-1.3V)
Start-up Time:	10ms maximum, 5ms typical
Current Consumption:	55mA typical, 60mA maximum (At 202.50MHz)
Static Discharge Protection:	2kV maximum
Storage Temperature:	$-55^\circ$ to $+150^\circ\text{C}$
Ageing:	$\pm 2\text{ppm}$ per year maximum
Enable/Disable:	Not implemented - 4 pin package
RoHS Status:	Fully compliant or non compliant

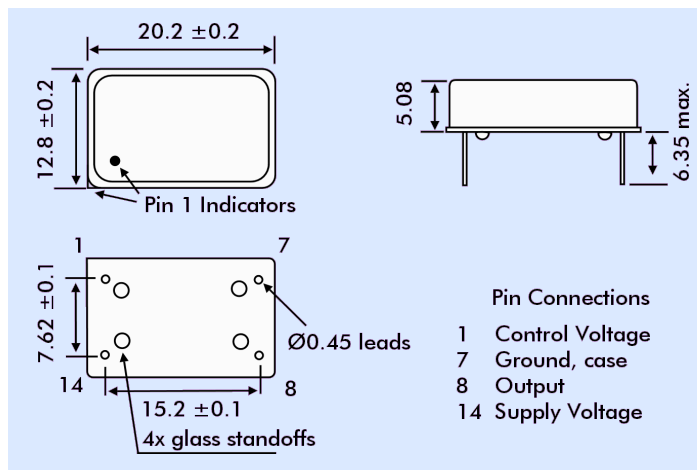
### FREQUENCY STABILITY

Stability Code	Stability $\pm\text{ppm}$	Temp. Range
A	25	$0^\circ \sim +70^\circ\text{C}$
B	50	$0^\circ \sim +70^\circ\text{C}$
C	100	$0^\circ \sim +70^\circ\text{C}$
D	25	$-40^\circ \sim +85^\circ\text{C}$
E	50	$-40^\circ \sim +85^\circ\text{C}$
F	100	$-40^\circ \sim +85^\circ\text{C}$

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



### OUTLINE & DIMENSIONS



### PART NUMBERING

