EUROQUARTZ

GPF14 PECL VCXO

14 pin Dual-in-Line — 38.0MHz to 640.0MHz

- **Frequency range 38MHz to 640MHz**
- **LVPECL Output**
- **Supply Voltage 3.3 VDC**
- **Phase jitter 0.4ps typical**
- **Pull range from ±30ppm to ±150ppm**

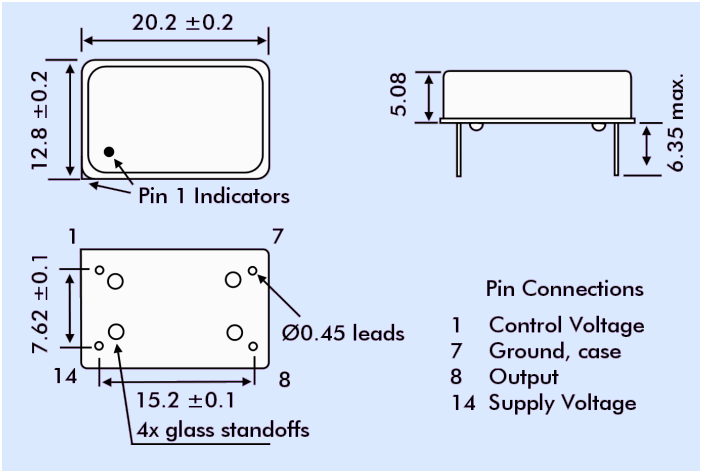
DESCRIPTION

GPF14 VCXOs are packaged in an industry-standard 14 pin dual-in-line package. Typical phase jitter for GPF series VCXOs is 0.4 ps. Output is LVPECL. 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 ±5%
Output Logic:	LVPECL
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 Vc= 1.65 ±0.2VDC
Output Voltage HIGH (1):	Vdd-1.025V minimum Vdd-0.880V maximum
Output Voltage LOW (0):	Vdd-1.810V minimum Vdd-1.620V maximum *(RL=50Ω to Vdd-2V)*
Pulling Range:	From ±30ppm to ±150ppm
Control Voltage Range:	1.65 ±0.35 Volts
Temperature Stability:	*See table*
Output Load:	50Ω into Vdd or Thevenin equiv.
Rise/Fall Times:	0.5ns typ., 0.7ns max. 20% Vdd to 80% Vdd
Duty Cycle:	50% ±5% *(Measured at Vdd-1.3V)*
Start-up Time:	10ms maximum, 5ms typical
Current Consumption:	75mA maximum at 212.5MHz 80mA maximum at 622.08MHz
Static Discharge Protection:	2kV maximum
Storage Temperature:	-55° to +150°C
Ageing:	±2ppm per year maximum
Enable/Disable:	*Not implemented - 4 pin package*
RoHS Status:	Fully compliant or non-compliant

OUTLINE & DIMENSIONS



PART NUMBERING

Example: 3GPF14G-B-80N-60.000

- Supply Voltage: 3 = +3.3V
- Series Designator: GPF14
- RoHS Status: G = RoHs compliant; Blank = RoHS non-compliant
- Stability over temperature range: (See table)
- Pullability in ±ppm
- Pullability determinator: N = minimum; M = maximum; T = Typical
- Frequency in MHz

FREQUENCY STABILITY

Stability Code	Stability ±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 ±20ppm

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