

8 pin Dual-in-Line VCXO

- Frequency range 750kHz to 800MHz
- LVPECL Output
- Supply Voltage 3.3 VDC
- Phase jitter 2.35ps typical
- Pull range from ± 30 ppm to ± 150 ppm



DESCRIPTION

GPW8 VCXOs are packaged in an industry-standard 8 pin dual-in-line package. Typical phase jitter for GPW series VCXOs is 2.35ps. Output is LVPECL. Applications include phase lock loop, SONET/ATM, set-top boxes, MPEG, audio/video modulation, video game consoles and HDTV.

SPECIFICATION

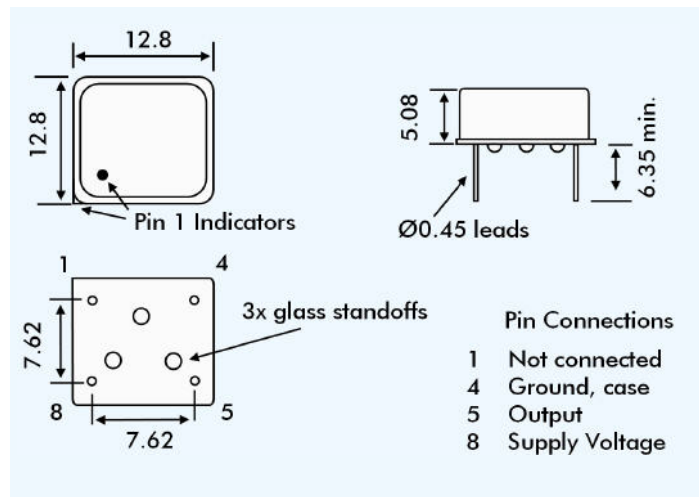
| | |
|------------------------------|---------------------------------------------------------------------------|
| Frequency Range: | 750.0kHz to 800.0MHz |
| Supply Voltage: | 3.3 VDC $\pm 5\%$ |
| Output Logic: | LVPECL |
| RMS Period Jitter: | 4.3ps typical |
| Peak to Peak Jitter: | 27.0ps typical |
| Phase Jitter: | 2.35ps typical |
| Initial Frequency Accuracy: | Tune to the nominal frequency with $V_c = 1.65 \pm 0.2$ VDC |
| Output Voltage HIGH (1): | Vdd-1.025V minimum Vdd-0.880V maximum |
| Output Voltage LOW (0): | Vdd-1.810V minimum Vdd-1.620V maximum ($R_L = 50\Omega$ to Vdd-2V) |
| Pulling Range: | From ± 30 ppm to ± 150 ppm |
| Control Voltage Range: | 1.65 ± 0.35 Volts |
| Temperature Stability: | See table |
| Output Load: | 50 Ω into Vdd or Thevenin equiv. |
| Rise/Fall Times: | 0.5ns typ., 0.7ns max. 20% Vdd to 80% Vdd |
| Duty Cycle: | 50% $\pm 5\%$ (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: | ± 2 ppm per year maximum |
| Enable/Disable: | Not implemented, 4 pin package |
| RoHS Status: | Fully compliant or non-compliant versions available |

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

OUTLINE & DIMENSIONS



PART NUMBERING

