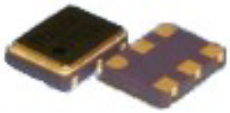
GDF576 LVDS VCXO

7 x 5 x 1.8mm SMD VCXO

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

RoHS COMPLIANT 2002 / 95 /EC



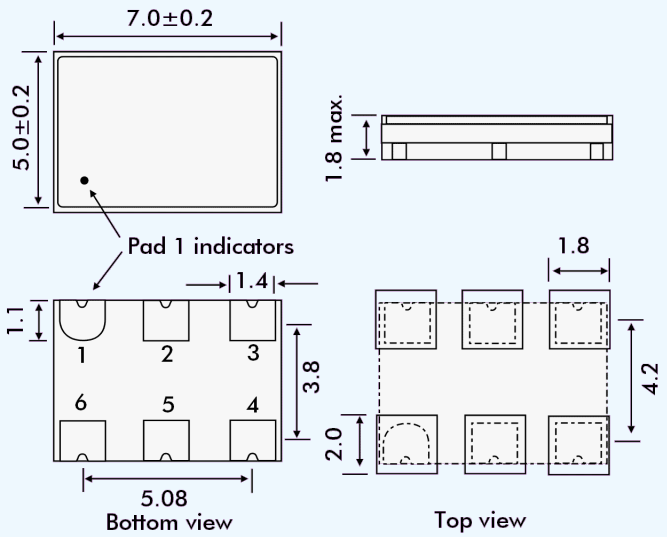
DESCRIPTION

GDF576 VCXOs are packaged in a 6 pad 7mm x 5mm SMD 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 ±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 Vc= 1.65 ±0.2VDC
Output Voltage HIGH (1):	1.4 Volts typical
Output Voltage LOW (0):	1.1 Volts typical
Pulling Range:	From ±30ppm to ±150ppm
Control Voltage Range:	1.65 ±1.35 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:	55mA typical, 60mA maximum *(At 202.50MHz)*
Static Discharge Protection:	2kV maximum
Storage Temperature:	-55° to +150°C
Ageing:	±2ppm per year maximum
Enable/Disable:	*See table*
RoHS Status:	Fully compliant

OUTLINE & DIMENSIONS



Pad Connections

1 Voltage Control
2 Enable/Disable
3 Ground
4 Output
5 Complimentary Output
6 Vcc

PART NUMBERING

Example: 3GDF576 B-80N-60.000

Supply Voltage
3 = +3.3V
Series Designator
GDF576
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

ENABLE/DISABLE FUNCTION

Tristate Pad Status	Output Status
Not connected	LVDS and Complimentary LVDS enabled
Below 0.3Vdd *(Ref. to ground)*	Both outputs are disabled (high impedance)
Above 0.7Vdd *(Ref. to ground)*	Both outputs are enabled

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