EURO QUARTZ

GPA64 PECL VCXO

11.4 x 9.6 x 4.7mm SMD

60.0MHz to 240.0MHz

- Frequency range 60MHz to 240MHz
- LVPECL Output
- Supply Voltage 3.3 VDC
- Phase jitter 0.2ps typical
- Pull range from ±30ppm to ±150ppm

RoHS ✓

DESCRIPTION

GPA64 VCXOs are packaged in a 6 pad 11.4 x 9.6mm SMD package. Typical phase jitter for GPA series VCXOs is 0.2 ps. Output is LVPECL. Applications include phase lock loop, SONET/ATM, set-top boxes, MPEG , audio/video modulation, video game consoles and HDTV.

SPECIFICATION

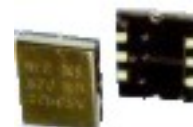|	
Frequency Range:	60.0MHz to 240.0MHz
Supply Voltage:	3.3 VDC ±5%
Output Logic:	LVPECL
RMS Period Jitter	
60.0MHz ~ 120MHz:	2.5ps typical
120MHz ~ 240MHz:	4.7ps typical
Peak to Peak Jitter	
60.0MHz ~ 120MHz:	17.5ps typical
120MHz ~ 240MHz:	24.5ps typical
Phase Jitter:	0.2ps typical
Initial Frequency 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:	*See table*
RoHS Status:	Fully compliant or non-compliant

FREQUENCY STABILITY

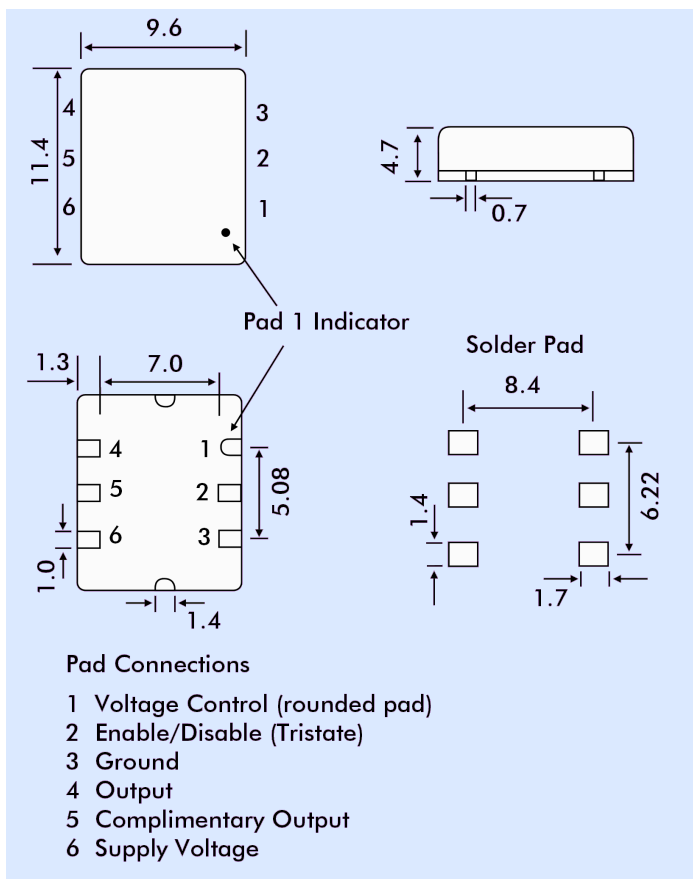| Stability Code	Stability ±ppm	Temp. Range
A	25	0°~+70°C
B	50	0°~+70°C
C	100	0°~+70°C
D	25	-40°~+85°C
E	50	-40°~+85°C
F	100	-40°~+85°C

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	LVPECL and Complimentary LVPECL enabled
Below 0.3Vdd (Ref. to ground)	Both outputs are disabled (high impedance)
Above 0.7Vdd (Ref. to ground)	Both outputs are enabled

OUTLINE & DIMENSIONS

Pad 1 Indicator

Solder Pad

Pad Connections

1 Voltage Control (rounded pad)
2 Enable/Disable (Tristate)
3 Ground
4 Output
5 Complimentary Output
6 Supply Voltage

PART NUMBERING

Example: **3GPA64GB-80N-60.000**

Supply Voltage
    3 = +3.3V
Series Designator
    GPA64
RoHS Status
    G = Compliant
    Blank - Non-compliant
Stability over temperature range
    (See table)
Pullability in ±ppm
Pullability determinator
    N = minimum
    M = maximum
    T = Typical
Frequency in MHz