EUROQUARTZ VOLTAGE CONTROLLED OSCILLATORS

'G' Series VCXOs 1.25MHz ~ 50.0MHz

- **Miniature packages available**
- **Frequency range 1.25MHz to 50.0MHz**
- **CMOS Output**
- **Supply Voltage 1.8V and 3.3V**
- **Integrated Phase Jitter 1ps max**
- **Fundamental mode crystals for best phase noise performance**

SUPPLY VOLTAGE DEPENDENT SPECIFICATION

Model:	'G' Series	
Input Voltage:	+1.8VDC±5%	+3.3VDC±10%
Frequency Range:	16.0MHz ~ 50.0MHz	1.25MHz ~ 50.0MHz
Output Logic 'High':	1.62V min.	2.97V min.
Output Logic 'Low':	0.18V max.	0.33V max.
Frequency Deviation Range:	Standard = ±80ppm min.	Standard = ±80ppm min.
Control Frequency Deviation Centre and Range:	0.9±0.9V	1.65±1.35V
Output Load:	15pF	
Rise/Fall Time:	4nsec. typ., 6nsec. max. (Measured between 10% ~ 90% of waveform)	
Duty Cycle:	50±10% standard, 50±5% optional (add -S to end of part number)	
RMS Jitter (12kHz to 20MHz):	1.0psec max.	
Start-up Time:	10msec. max.	
Current Consumption:	10~45mA (frequency dependent, e.g. 27MHz @3.3V = 10mA typ.)	
Linearity:	6% typ., 10% max.	
Modulation Bandwidth:	10kHz min., measured at -3dB	
Input Impedance:	5MΩ typ.	
Slope Polarity:	Monotonic and Positive; Increasing control voltage increases output frequency	
Storage Temperature:	-55°C to +125°C	
Aging at +25°C:	±3ppm per year max.	
Output Enable/Disable:	Enable: 70% of Vdd to enable output; 2msec max. enable time Disable: 30% of Vdd to disable output: 100nsec max. disable time	

Phase Noise 27MHz, 3.3V	Offset	10Hz	100Hz	1kHz	10kHz	100kHz	1MHz
	dBc/Hz	-40	-104	-132	-147	-152	-150

FREQUENCY STABILITY OVER TEMPERATURE

Frequency Stability over Operating Temperature Range	±25ppm	±50ppm	±100ppm
-10°C to +70°C	A	B	C
-40°C to +85°C	D	E	F

PART NUMBER SCHEDULE

Example: 3G226B-100N-27.000

Supply Voltage
18 = 1.8V
3 = 3.3V

Package
G226 = 2.5 x 2.0mm
G326 = 3.2 x 2.5mm
G536 = 5.0 x 3.2mm
G576 = 7.0 x 5.0mm

Stability over temperature range
Refer to table above

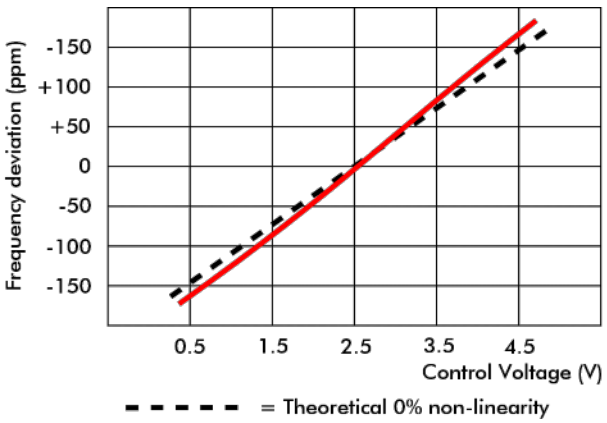
Pullability

Pullability determinator
N = minimum
M = maximum
T = Typical

Frequency

TRANSFER FUNCTION

Typical response of 3G226-C-150N-27.000
(at 25°C, positive transfer)



Issue 1

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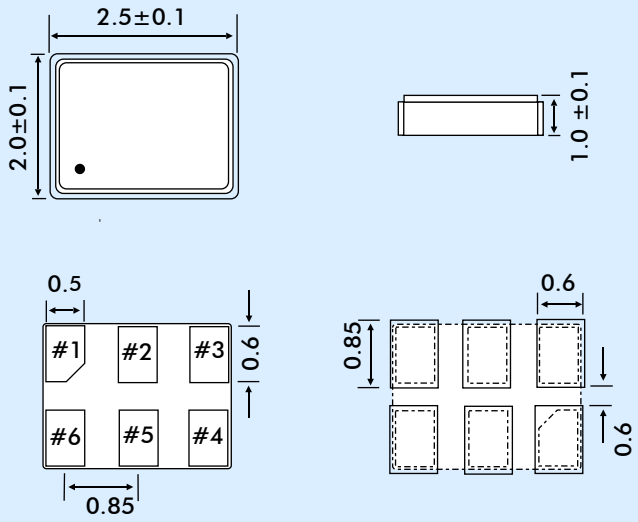
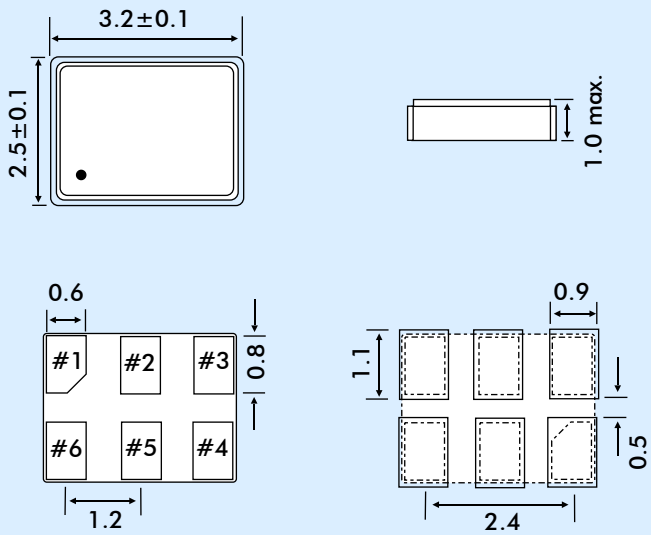
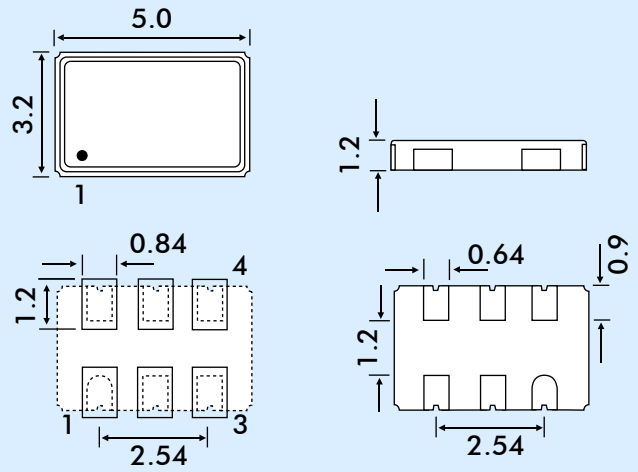
G226



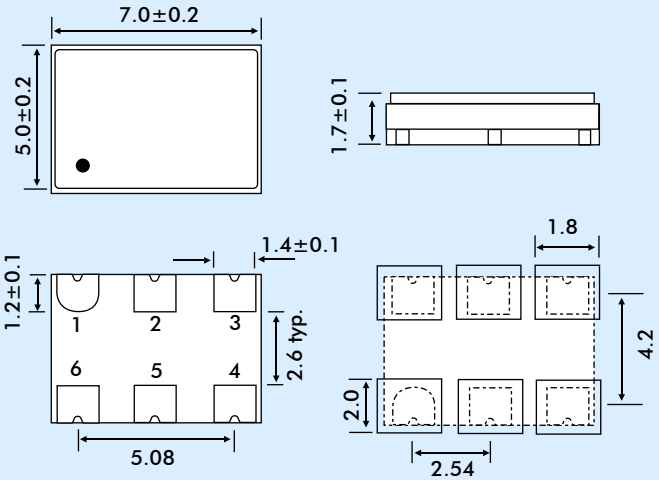
G326



G536



G576



Pad Connections:

Pad 1: Control Voltage
Pad 2: Output Enable
Pad 3: Ground
Pad 4: Output
Pad 5: No Connection
Pad 6: Supply Voltage

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