

- Micro-miniature 6 pad SMD package VCXO
- Frequency range 1.25MHz to 50.0MHz
- CMOS/TTL Output
- Supply Voltage 1.8V, 3.3V and 5.0V
- Integrated Phase Jitter 1ps max
- Fundamental mode crystals for best phase noise performance



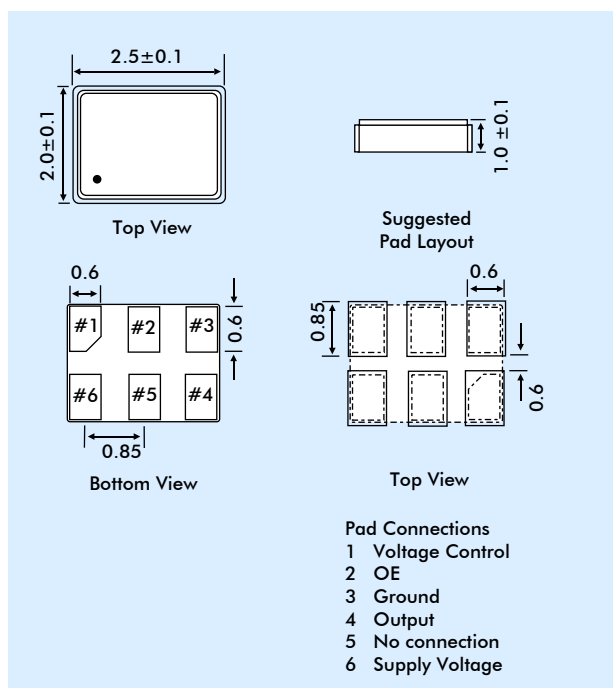
SUPPLY VOLTAGE DEPENDENT SPECIFICATION

Model:	'G' Series		
Input Voltage:	Vdd = +1.8VDC±5%	Vdd = +3.3VDC±10%	Vdd = +5.0VDC±10%
Frequency Range*:	16MHz ~ 50.0MHz	1.25MHz ~ 50.0MHz	1.25MHz ~ 50.0MHz
Output Wave Form:	CMOS		
Initial Freq. Accuracy	Tune with Vc = 0.9V	Tune with Vc = 1.65V	Tune with Vc = 2.5V
Output Logic High '1'	1.62V minimum	2.97V minimum	4.5V minimum
Output Logic Low '0'	0.18V maximum	0.33V maximum	0.5V maximum
Frequency Deviation Range:	Standard ±80ppm min.	Standard ±80ppm min.	Standard ±80ppm (min.); ±200ppm (min.) Available
Control Voltage Centre:	0.9 VDC	1.65 VDC	2.5 VDC
Control Voltage Range:	0.0V to 1.8V	0.3V to 3.0V	0.5V to 4.5V

GENERAL SPECIFICATION

Frequency Stability:	See table
Output Load:	15pF
Rise/Fall Times	6ns max., 4ns typical Measured between 10% to 90% of wave form, (CL = 15pF)
Duty Cycle:	50%±10% standard, 50%±5% is available, add 'S' to part number
Integrated Phase Jitter:	1ps max. (12kHz to 20MHz)
Start-up Time:	10ms max.
Current Consumption:	10~45mA, freq. dependant e.g. 27MHz: 10mA @ 3.3V, 20mA @5V
Linearity:	6% typical, 10% max.
Modulation Bandwidth:	10kHz min. Measured at -3dB
Input Impedance:	5MΩ typical
Slope Polarity:	Monotonic and positive (An increase of control voltage increases output frequency.)
Ageing:	±3ppm per year max.
Tri-state	
Enable high:	70% of Vdd to enable; 2msec (max.) Enable time
Disable:	30% of Vdd to disable; 100nsec (max.) Disable time

OUTLINE AND DIMENSIONS



PHASE NOISE

Characteristics typical of 27MHz, +3.3V supply.

Offset	10Hz	100Hz	1kHz	10kHz	100kHz	1MHz
dBc/Hz	-40	-104	-132	-147	-152	-150

FREQUENCY STABILITY OVER TEMPERATURE*

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

* See ordering information

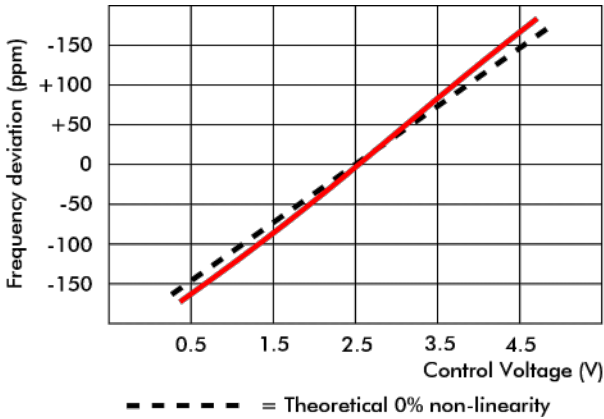
** If non-standard temperature stability is required enter the required stability (in ppm) after either 'C' (-10° to +70°) or 'I' (-40° to +85°C)

Example: 'C20' = ±20ppm over -10 to +70°C

Issue 4

TRANSFER FUNCTION

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



PART NUMBER SCHEDULE

Example: **3G226B-100N-27.000**

Supply Voltage
18 = 1.8V
3 = 3.3V
5 = 5.0V

Series Designator
G226

Stability over temperature range
A = ±25ppm over -10° to +60°C
B = ±50ppm over -10° to +60°C
C = ±100ppm over -10° to +60°C
D = ±25ppm over -40° to +85°C
E = ±50ppm over -40° to +85°C
F = ±100ppm over -40° to +85°C

Pullability

Pulling Range	Control Voltage Range	Control Voltage Centre
3.3V ~30ppm~150ppm	0.3V~3.0V	±1.65V
5.0V ±70ppm~±200ppm	0.5V~4.5V	±2.5V

Pullability determinator
N = minimum
M = maximum
T = Typical

Frequency
MHz