

- Micro-miniature 6 pad SMD package VCXO
- Frequency range 1.25MHz to 50.0MHz
- CMOS/TTL Output
- Supply Voltage 2.5V, or 3.3V
- Integrated Phase Jitter 1ps max
- Fundamental mode crystals for best phase noise performance



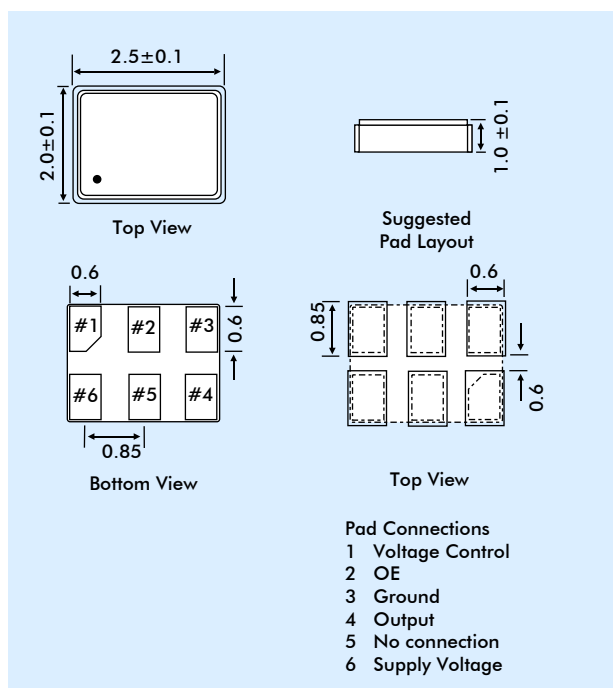
### SUPPLY VOLTAGE DEPENDENT SPECIFICATION

Model:	'G' Series	
Input Voltage:	<b>Vdd = +2.5VDC±5%</b>	<b>Vdd = +3.3VDC±10%</b>
Frequency Range*:	1.25MHz ~ 50.0MHz	1.25MHz ~ 50.0MHz
Output Wave Form:	CMOS	
Initial Freq. Accuracy	Tune with Vc = 1.25V±0.2V	Tune with Vc = 1.65V±0.2V
Output Logic High '1'	2.25V minimum	2.97V minimum
Output Logic Low '0'	0.25V maximum	0.33V maximum
Frequency Deviation Range:	Standard ±80ppm min.	Standard ±80ppm min.
Control Voltage Centre:	1.25VDC	1.65 VDC
Control Voltage Range:	0.25V to 2.25V	0.3V to 3.0V

### GENERAL SPECIFICATION

Frequency Stability:	See table
Output Load:	15pF
Rise/Fall Times	6ns max., 4ns typical Measured between 20% to 80% 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., 5ms typical
Current Consumption:	10~45mA, freq. dependant e.g. 27MHz: 10mA @ 3.3V
Linearity:	6% typical, 10% max.
Modulation Bandwidth:	10kHz min. Measured at -3dB with V control at 1.65V or 2.5V
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:	No connection or VDD-0.5V min. is applied to Tri-state pin to enable.
Disable:	Ground +0.5V max. disables output. (High impedance)

### 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

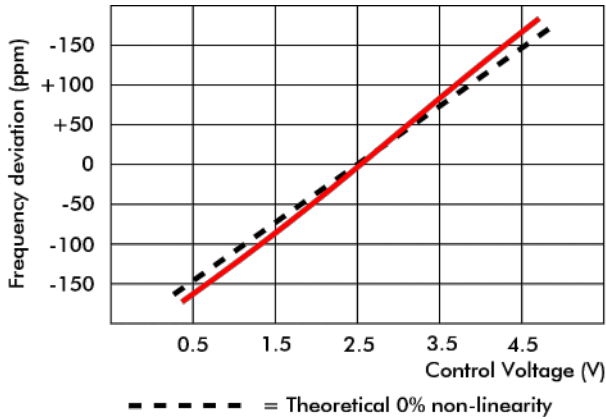
\*\* If non-standard temperature stability is required enter the required stability (in ppm) after either 'C' (-10° to +70°) or 'I' (-40° to +85°C)

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

Issue 3

**TRANSFER FUNCTION**

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



**PART NUMBER SCHEDULE**

