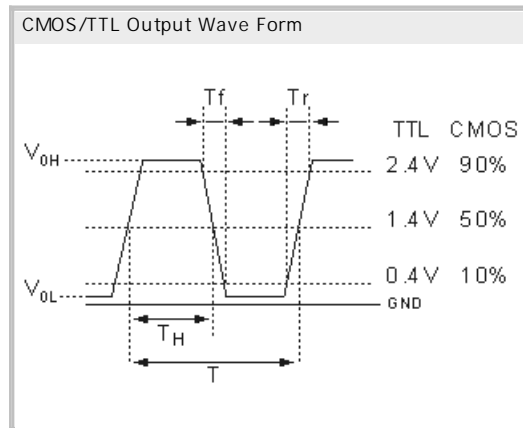
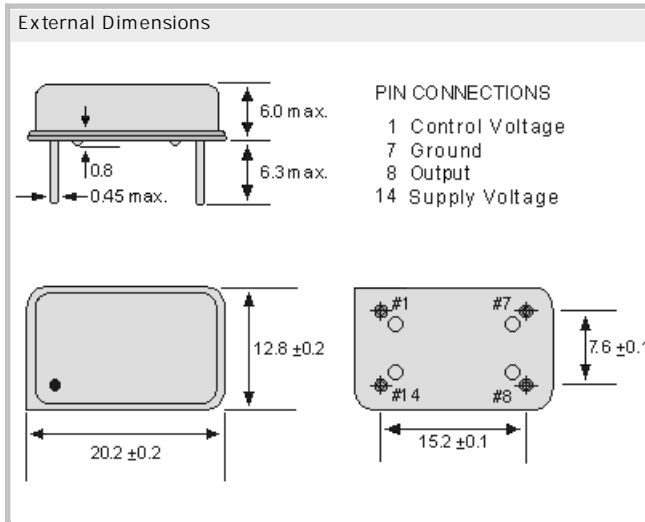




VCXO-12T5.0 DIL 14 5.0V  
Voltage Controlled Crystal Oscillator

- Output Wave Form CMOS/TTL
- Packed in antistatic tubes
- RoHS conform; Lead-free product
- Vibration: MIL-STD-202F method 204, 35G, 50 to 2000 Hz
- Shock: MIL-STD-202F method 213B, test cond. E, 1000G 1/2 sine wave
- Available in many standard and special frequencies



## Specifications - Product No. G022118400BGCUPC00BA

Holder Type:	VCXO-12T5.0 5.0V (Voltage code is " 5.0 " )
Frequency:	22.118400 MHz
Initial Freq. Accuracy (at 25 °C):	To tune to the nominal frequency with V <sub>c</sub> = 2.5V ± 0.2V
Frequency Stability at 25°C:	± 50.0 ppm
Storage Temperature:	-50°C to +105°C
Current Consumption:	20 mA typical, 45 mA max.
Frequency Deviation:	± 100 ppm
Operating Temperature Range:	± 50.0 ppm over -20°C to +70°C (inclusive of 25°C tolerance, ± 10% input voltage variation, load change, aging, shock and vibration )
Power Supply Voltage (V <sub>dd</sub> ):	+ 5.0V DC ± 10%
Maximum Supply Current:	35.0 mA
Output Load CL:	2 TTL gates max. / CMOS 15 pF
Output "1" Level (V <sub>OH</sub> )/"0" Level (V <sub>OL</sub> ):	2.4V (min. ) TTL / 4.5V (min. ) CMOS // 0.4V (max. ) TTL / 0.5V(max. ) CMOS
Output Symmetry (Duty Cycle):	40/60%
Modulation Bandwidth (at -3 dB):	10KHz min, V <sub>control</sub> at 1.65V or at 2.5V
Voltage Control:	2.5V DC Center / 0.5V to 4.5V Range
Linearity:	6% typical; 10% max.
Rise/Fall Time TTL:	6ns (max.) 4ns (typ.) Measured between 0.4V and 2.4V
Rise/Fall Time CMOS:	6ns (max.) 4ns (typ.) Measured between 20% and 80% V <sub>dd</sub> of the wave form (CL = 15pF)
Integrated Phase Jitter:	1 ps max. (12 kHz to 20 MHz)
Period Jitter:	RMS 2.0 ps (typ.) / Peak to Peak 14 ps max.
Phase Noise (27MHz at 3.3V):	-40dBc/Hz at 10Hz offset -147dBc/Hz at 10kHz offset -104dBc/Hz at 100Hz offset -152dBc/Hz at 100kHz offset -132dBc/Hz at 1kHz offset -150dBc/Hz at 1MHz offset
Start Up Time:	10 ms (max.), 5ms (typ.)
Aging:	± 3 ppm per year (max.)
Input Impedance:	1 M Ohm typical
Reflow Condition:	10 sec. max. at 260°C

### GERMANY:

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