



VCXO-Oscillator SMD VCXO7050T5.0-6pad, 5.0V Voltage Controlled Crystal Oscillator

- CMOS/TTL Output Wave Form
- SMD in ceramic case (7.0 x 5.0 x 1.8) mm, on Tape & Reel (Tape 16mm)
- with Tri-State Function, 3.3 V
- 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, 1000GG 1/2 sine wave
- Available in many standard and special frequencies



Specifications

Holder Type:	VCXO7050T5.0-6pad 5.0V (Voltage code is " 5.0 ") Tri-State
Frequency:	20.000000 MHz
Initial Freq. Accuracy (at 25 °C):	To tune to the nominal frequency with $V_c = 2.5V \pm 0.2V$
Freq. Stability o.Operating Temp. Range:	± 50.0 ppm
Operating Temperature Range:	± 50.0 ppm over $-20^\circ C$ to $+70^\circ C$ (inclusive of $25^\circ C$ tolerance, $\pm 10\%$ input voltage variation, load change, aging, shock and vibration)
Frequency Deviation:	± 100 ppm
Power Supply Voltage (Vdd):	+ 5.0V DC $\pm 10\%$
Maximum Supply Current:	35.0 mA
Output Load CL :	2 TTL gates max. / CMOS 15 pF
Output "1" Level (VOH):	2.4V (min.) TTL / 4.5V (min.) CMOS
Output "0" Level (VOL):	0.4V (max.) TTL / 0.5V (max.) CMOS
Output Symmetry (Duty Cycle):	40/60%
Tri-State Function:	Tri-State Enable High. No connection or $V_{dd} - 0.5V_{min}$. is applied to a Tri-state pin to enable output. Ground+0.5Vmax. to disable output (high impedance).
Modulation Bandwidth (at -3 dB):	10KHz min, $V_{control}$ 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_{dd} 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; -104dBc/Hz at 100Hz ; -132dBc/Hz at 1kHz , -147dBc/Hz at 10kHz ; -152dBc/Hz at 100kHz ; -150dBc/Hz at 1MHz
Start Up Time:	10 ms (max.), 5ms (typ.)
Aging:	± 3 ppm per year (max.)
Input Impedance:	1 MOhm typical
Reflow Condition:	10 sec. max. at $260^\circ C$

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