

### FEATURES

# SERIES CX21, CX22, AND CX23

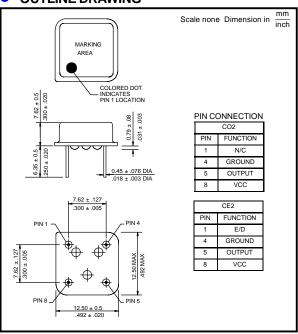
- COST EFFECTIVE MPU CLOCK
- TOLERANCE AND STABILITY TO ±5 PPM
- CUSTOM SPECIFICATIONS

#### SPECIFICATIONS

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FREQUENCY RANGE	1.00 MHz TO 100.00 MHz			
FREQUENCY STABILITY OVER TEMPERATURE RANGE (REF. TO25°C)	±5 PPM TO ±50 PPM MAX AT VCC = +5.0 VDC (SEE TABLE 1)			
OPERATING TEMPERATURE RANGE	0°C TO +50°C (NARROW) 0°C TO +70°C (STANDARD) -40°C TO +85°C (EXTENDED) AT VCC = +5.0VDC AND STANDARD LOAD (SEE TABLE 1)			
STORAGE TEMPERATURE RANGE	-40°C TO +85°C			
AGING CHARACTERISTICS	±4 PPM MAX FOR THE FIRST YEAR AND ±20 PPM MAX FOR 10 YEARS			
OUTPUT WAVEFORM OPTIONS	TTL, HCMOS, OR ACMOS			
SYMMETRY	NORMAL: 40/60% TIGHT: 45/55% (OPTION)			
FREQUENCY STABILITY OVER LOAD VARIATION	±3 PPM MAX FOR 10% VARIATION AT VCC = +5.0 VDC AT 25°C			
SUPPLY VOLTAGE	+5.0 VDC ±5% (3.3 VDC AVAILABLE)			
ENABLE/DISABLE FUNCTION	CONTROL PIN 1: HIGH OR OPEN (+2.0 VDC MIN)OUTPUT PIN 8: ENABLED CONTROL PIN 1: LOW OR GROUND (+0.8 VDC MIN)OUTPUT PIN 8: DISABLED (HIGH Z			
FREQUENCY STABILITY OVER SUPPLY VOLTAGE VARIATION	±5 PPM MAX FOR 5% VARIATION AT VCC = +5.0 VDC AND STANDARD LOAD AT 25°C			
SUPPLY CURRENT	50 mA MAX AT VCC = +5.0 VDC AND STANDARD LOAD AT 25°C			



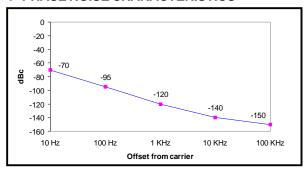
## OUTLINE DRAWING



## TEMPERATURE RANGE DESIGNATIONS

	TABLE 1				
CODE	TEMPERATURE RANGE	TEMPERATURE STABILITY			
Α	0°C TO +50°C	± 5 PPM			
В	0°C TO +50°C	± 10 PPM			
С	0°C TO +50°C	± 15 PPM			
D	0°C TO +50°C	± 20 PPM			
Е	0°C TO +50°C	± 25 PPM			
F	0°C TO +70°C	± 10 PPM			
G	0°C TO +70°C	± 15 PPM ± 20 PPM			
Н	0°C TO +70°C				
I	0°C TO +70°C	± 25 PPM			
J	0°C TO +70°C	± 35 PPM			
K	0°C TO +70°C	± 50 PPM			
L	-40°C TO +85°C	± 20 PPM			
М	-40°C TO +85°C	± 25 PPM			
0	-40°C TO +85°C	± 30 PPM			
Р	-40°C TO +85°C	± 35 PPM			
Q	-40°C TO +85°C	± 50 PPM			

### PHASE NOISE CHARACTERISTICS



## MECHANICAL CHARACTERISTICS

MECHANICAL SHOCK	IEC-68-2-27 TEST EA, 30g FOR 18 ms HALFSINE
VIBRATION	IEC 68-2-6 (TEST FC) 0.35 mm, 5g, 10-2 kHz, 6 CYCLES AXIS
THERMAL SHOCK	IEC 68-2-14 (TEST NA), 30 min IN EACH TEMPERATURE EXTREME
SEAL	IEC 68-2-17 (TEST QC)
SOLDERING HEAT	IEC 68-2-20A
MECHANICAL	14 PIN DIP, LEADED, PER OUTLINE DRAWING

## • PART NUMBERING SYSTEM

SERIES		OUTPUT	CODE		FREQUENCY		SYMMETRY
CO2 CE2	1 2 3	TTL HCMOS ACMOS	A THROUGH M	-	IN MHz	-	T (45/55%)

EXAMPLE:

CO22L-20.000-T

HCMOS OUTPUT ±50 PPM OVER 0° C TO +70° C TIGHT SYMMETRY