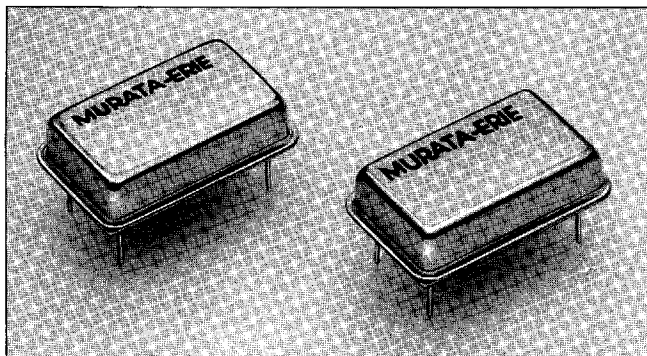
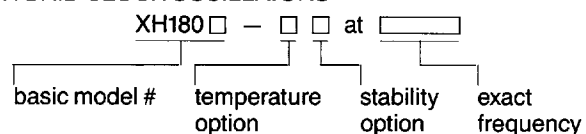


HYBRID CLOCK OSCILLATORS



PART NUMBERING SYSTEM

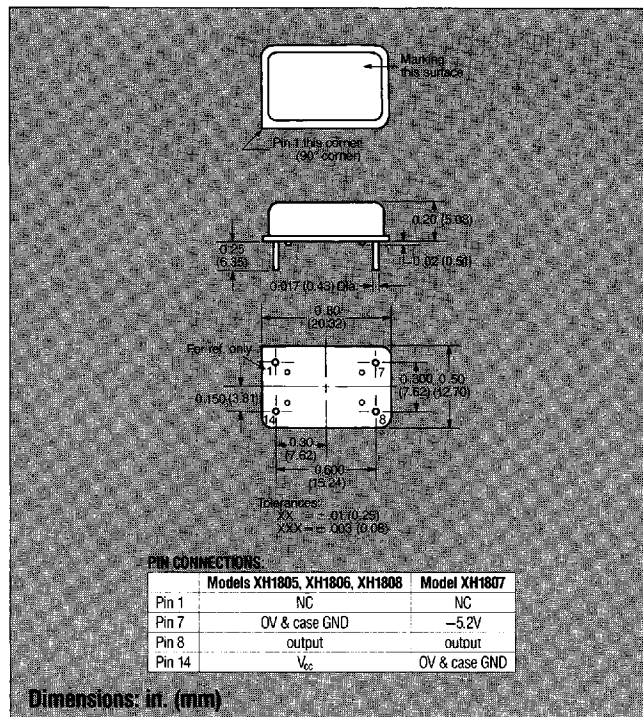
HYBRID CLOCK OSCILLATORS



Example: **XH1807 - 2 B at 25.0MHz**

Breakdown of the example part number:

- XH1807**: ECL model
- 2 B**: -40°C to +85°C
- at 25.0MHz**: ±100ppm
- 25.0MHz**: 25.0MHz



SPECIFICATIONS

Frequency range	TTL	CMOS	ECL	Sine Wave
1.0Hz to 4.99MHz	XH1805	XH1806	N/A	N/A
5.0MHz to 19.99MHz	XH1805	XH1806	XH1807	XH1808
20.0MHz to 59.99MHz	XH1805	XH1806	XH1807	XH1808
60.0MHz to 99.99MHz	XH1805	XH1806	XH1807	XH1808
100.0MHz to 135.0MHz	N/A	N/A	XH1807 ④	XH1808 ④
Input voltage	+5.0VDC ±10%	+5.0VDC ±10%	-5.2VDC ±5%	+5.0VDC ±5%
Input current ①	12mA Typ.	10mA Typ.	35mA Typ.	25mA Typ.
Output voltage and Load	0.4V max. to 2.4V min. up to 10 STD. TTL loads 1Hz to 19.99MHz 0.5V max. to 2.4V min. up to 10 Schottky loads 20MHz to 99.99MHz	0.5V max. to V _{DD} - 0.5V min. up to 10CMOS loads	-0.89VDC ±0.18V to -1.75VDC ±0.15V (50Ω to -2.0V)	+3dBm min. into 50Ω
Symmetry	55/45 max. 1Hz to 4.99MHz 60/40 max. 5MHz to 99.99MHz measured at 1.5V	55/45 max. 1Hz to 4.99MHz 60/40 max. 5MHz to 99.99MHz measured at 50%	60/40 max. measured at 50%	Harmonics: -20dBc max.

Notes:

- Input current is dependent on frequency.
- Storage temperature range for all models is -62°C to +125°C.
- Other options such as multiple outputs, enable inputs, frequency

- adjustment, tighter frequency tolerances and MIL-STD-883 screening are available — contact the factory for details.
- Higher frequencies available in 24-pin DIP package.

ABSOLUTE FREQUENCY STABILITY OPTIONS

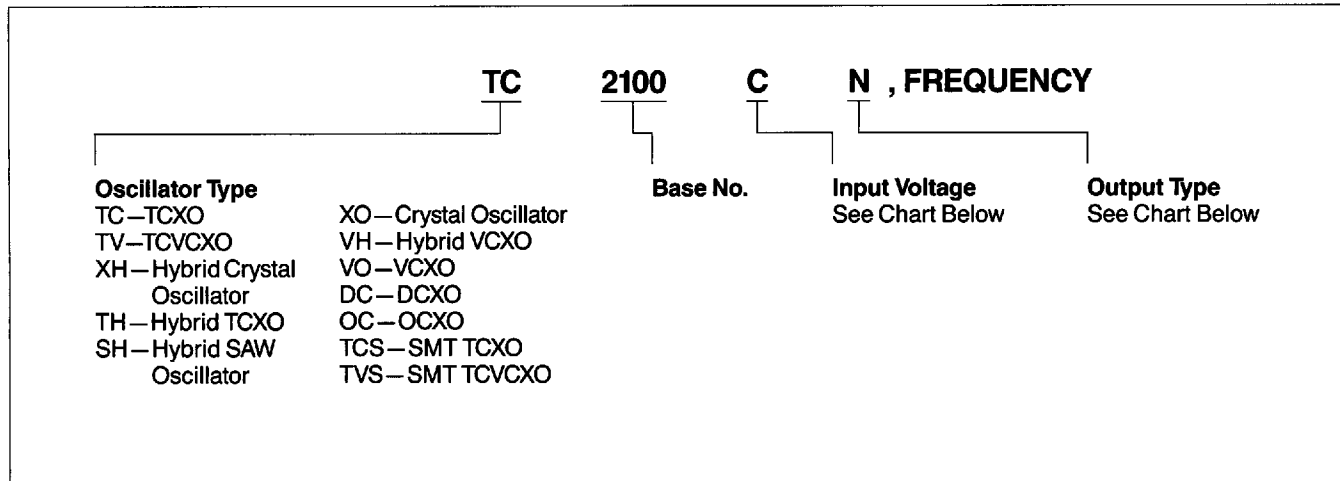
A	±50ppm (±.005 %)
B	±100ppm (±.01 %)
C	±500ppm (±.05 %)
D	±1000ppm (±.10 %)
E	±10000ppm (±1.0 %)
F	±25ppm (±.0025%)

OPERATING TEMPERATURE RANGE OPTIONS

-1	0°C to +70°C
-2	-40°C to +85°C
-3	-55°C to +105°C
-4	-55°C to +125°C

CRYSTAL OSCILLATORS

PART NUMBERING

INPUT VOLTAGE ($\pm 5\%$ TOLERANCE STANDARD)

A	+5.0VDC
B	+7.5VDC
C	+10.0VDC
D	+12.0VDC
E	+15.0VDC
F	+24.0VDC
G	+28.0VDC
H	-5.2VDC
J	-12.0VDC
K	-4.5VDC
L	+4.0VDC

OUTPUT TYPE

T	TTL
C	CMOS
H	"HC" CMOS
E	ECL "10KH"
F	ECL "100K"
G	SINE, 0dBm, 50 Ω LOAD
J	SINE, +3dBm, 50 Ω LOAD
K	SINE, +7dBm, 50 Ω LOAD
L	SINE, +10dBm, 50 Ω LOAD
M	SINE, +13dBm, 50 Ω LOAD
N	SINE, 1V _{p-p} , 1K Ω LOAD
P	0dBm min., 50 Ω LOAD
Q	1V _{p-p} Min. (DC-CUT), 10K Ω in parallel with 10pF LOAD
R	1V _{p-p} Min. (DC-CUT), 20K Ω in parallel with 10pF LOAD

RELATIVE FREQUENCY STABILITY OF TYPICAL CRYSTAL OSCILLATOR TYPES

