

Features:

- Frequency Range up to 160.0 MHz
- 3.3V Operation
- Surface Mount Package
- Low Cost
- AC MOS/TTL Compatible
- Optional Disable Feature



The CTS Reeves Model 385L/386L is a small size VCXO, which uses ASIC Technology to achieve superior cost performance in a true SMT Package. Used in Phase Lock Loop Applications, its small size means more application flexibility. The Model 385L/386L is useful in almost any VCXO application. The Model 386L disable feature is perfect for automated testing.

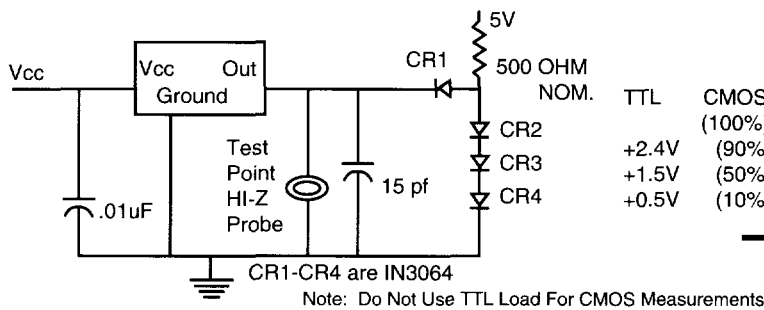
Electrical Specifications: (Vcc = +3.3V ±10%, Load = 30 pF)

Parameter	Symbol	Min	Max	Unit
Operating Supply Current	IDD	See Figure 5		mA
Output Voltage Levels				
Logic '1' Level (I _{OH} = 4 mA)	VOH	0.9*Vcc		Volts
Logic '0' Level (I _{OL} = -4 mA)	VOL		0.4	Volts
Output Transition Times				
Rise Time	Tr		5.0	nSeconds
Fall Time	Tf		5.0	nSeconds
Output Duty Cycle	SYM	45	55	%
Period Jitter (pk-pk)			200	pS
			0.01	Unit Interval
Start Up Time			10.0	mSeconds
Output Clock Frequency	fo	1.65	100	MHz

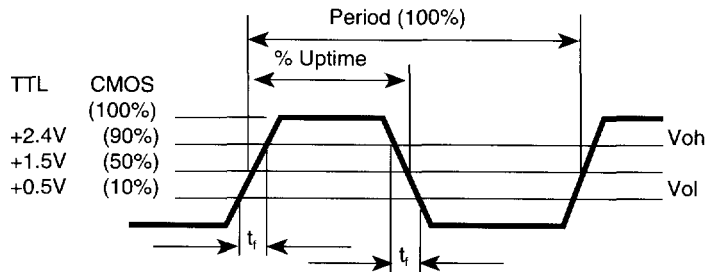
Voltage Control Specifications (+25°C)

Parameter	Symbol	Min	Nominal	Max	Unit
Control Voltage	Vc	0.5	1.75	3.0	Volts
Deviation Range		65	80	95	±ppm
Linearity			4	10	%
Transfer Function			Positive		
Input Impedance		50			KOhms
Modulation Roll-off		10	15		kHz

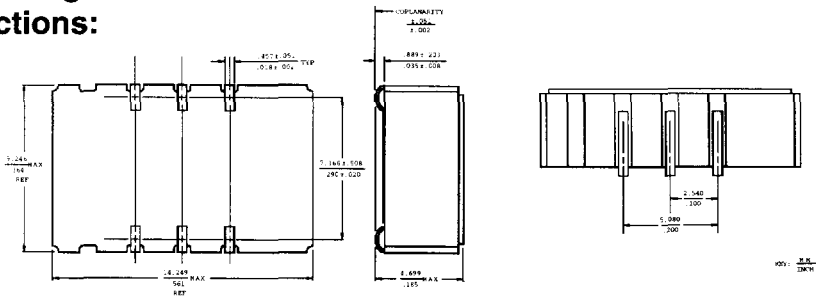
Equivalent Test Load: 5 TTL LOADS



Waveform Conditions:



Outline Drawing and Pin Connections:



Pin Description

PIN	FUNCTION
1	V CONTROL
2	OEH (OPTIONAL Model 386)
3	CASE/CKT GND
4	OUTPUT
5	N/C
6	Vcc

Environmental Specifications:

Shock:

2000 G's 0.5 mS, 3 shocks per direction,
Per MIL-STD-883, Method 2002

Sinusoidal Vibration:

0.06" DA, 10 to 55 Hz and 15 G's, 55 to
2000 Hz, Per MIL-STD-883, Method 2007

Random Vibration:

20 G's rms. 20 to 2000 Hz, Per MIL-STD-883,
Method 2026

Moisture:

10 cycles, per MIL-STD-883, Method 1004
(Omit sub-cycle 7)

Seal:

3 x 10⁻⁸ ATM-cc/sec, Per MIL-STD-883,
Method 1014, Conditions B1 % B2

Marking Permanency:

Per MIL-STD-883, Method 2015

Electro-Static Discharge:

Per MIL-STD-883, Method 3016 2KV
Class 1 (Sensitivity)

Attachment Method:

Per MIL-STD-202, Method 210
Condition K (250°C ±5°C maximum
peak, 90 to 120 seconds over 183°C)

Configuring The Part Number...

MODEL 385L
386L = Tri-State

Supply/Lead Options
A = J-Lead
B = Leadless

Frequency Tolerance
3 = ±0.005% (±50 ppm)
5 = 0.0025% (±25 ppm)

Op. Temp. Range
C = 0°C to +70°C
I = 40°C to +85°C

Factory Use
AA = Standard

Frequency (M represents decimal)
M (8M192000 FOR 8.192000 MHz)
M (16M38400 FOR 16.38400 MHz)
M (155M5200 for 155.5200 MHz)

* Inclusive of initial tolerance at time of shipment, changes in supply voltage, load, temperature, and first year aging.