

Features:

- Frequency Range up to 100.0 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: ($V_{cc} = +3.3V \pm 10\%$, Load = 30 pF)

Parameter	Symbol	Min	Max	Unit
Operating Supply Current*	IDD		50	mA
Output Voltage Levels				
Logic '1' Level ($I_{OH} = 4 \text{ mA}$)	VOH	$0.9 \cdot V_{cc}$		Volts
Logic '0' Level ($I_{OL} = -4 \text{ mA}$)	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

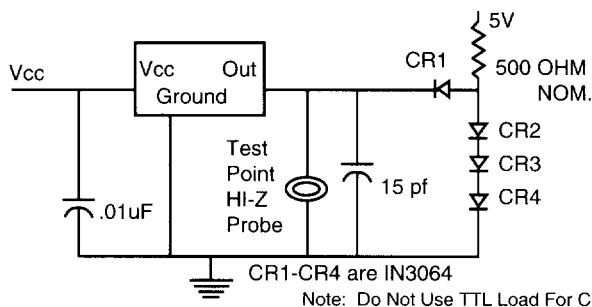
* Supply Current varies with Frequency and Load. Consult Factory with specific requirements.

Voltage Control Specifications (+25°C)

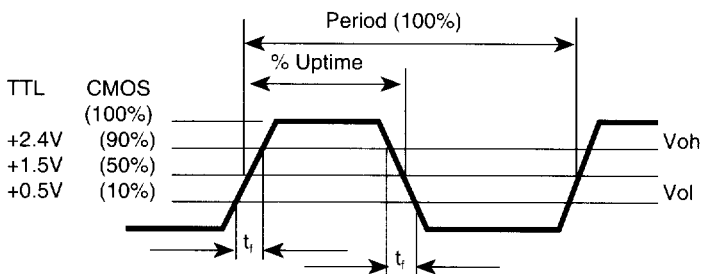
Parameter	Symbol	Min	Nominal	Max	Unit
Control Voltage	Vc	0.5	1.75	3.0	Volts
Deviation Range		65	80	95	±ppm
Linearity			4	10	%
Transfer Function			Positive		
Input Impedance		50			KOhms
Modulation Roll-off		10	15		kHz

VCXOs

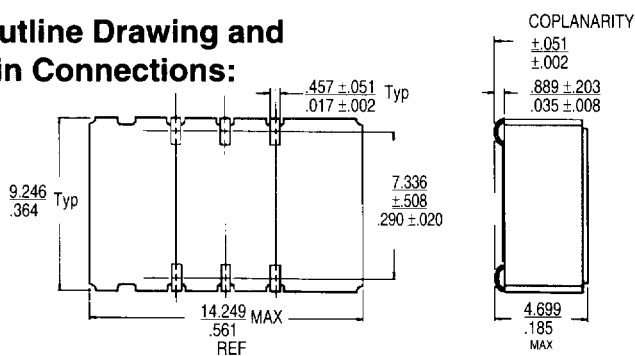
Equivalent Test Load: 5 TTL LOADS



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

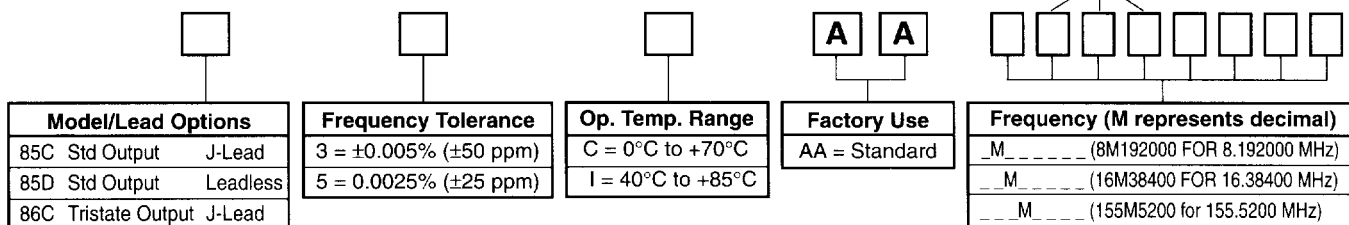
Electro-Static Discharge:

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...



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