

Features:

- Frequency Range up to 100.0 MHz
- Surface Mount Package
- Low Cost
- AC MOS/TTL Compatible
- Optional Disable Feature
- Standard Frequencies

The CTS Reeves Model 385/386 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 385/386 is useful in almost any VCXO application. The Model 386 disable feature is perfect for automated testing.



Electrical Specifications: ($V_{CC} = +5.0V \pm 10\%$, Load = 30 pF)

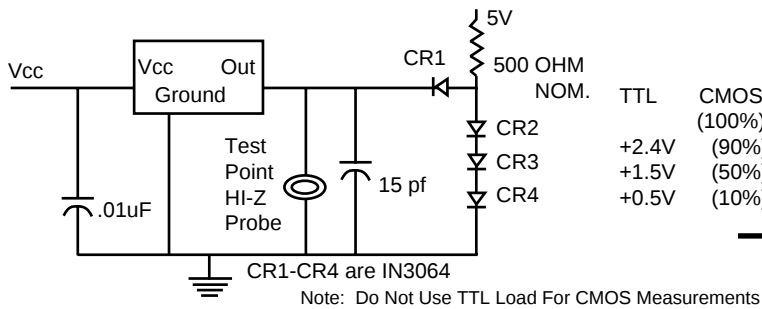
Parameter	Symbol	Min	Max	Unit
Operating Supply Current*	IDD		85	mA
Output Voltage Levels				
Logic '1' Level ($I_{OH} = 8$ mA)	VOH	0.9*Vcc		Volts
Logic '0' Level ($I_{OL} = -8$ mA)	VOL		0.4	Volts
Output Transition Times				
Rise Time	Tr		5.0	nSeconds
Fall Time	Tf		5.0	nSeconds
Output Duty Cycle (below 100 MHz)	SYM	45	55	%
Output Duty Cycle (above 100 MHz)	SYM	40	60	%
Period Jitter (pk-pk)			200	pS
			0.01	Unit Interval
Start Up Time			10.0	mSeconds
Output Clock Frequency	fo	1.65	160	MHz

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

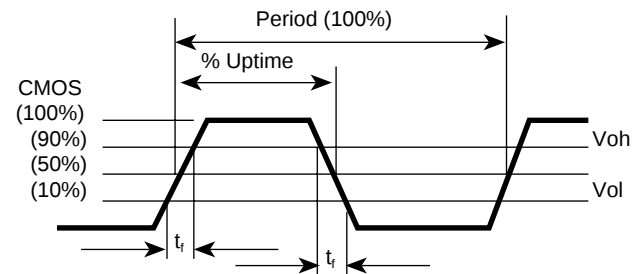
Voltage Control Specifications (+25°C)

Parameter	Symbol	Min	Nominal	Max	Unit
Control Voltage	Vc	0.5	2.5	4.5	Volts
Deviation Range		100	125	150	±PPM
Average Tuning Sensitivity		50	62.5	75	PPM/V
Linearity			4	10	%
Transfer Function			Positive		
Input Impedance		50			KOhms
Modulation Roll-off		10	15		kHz

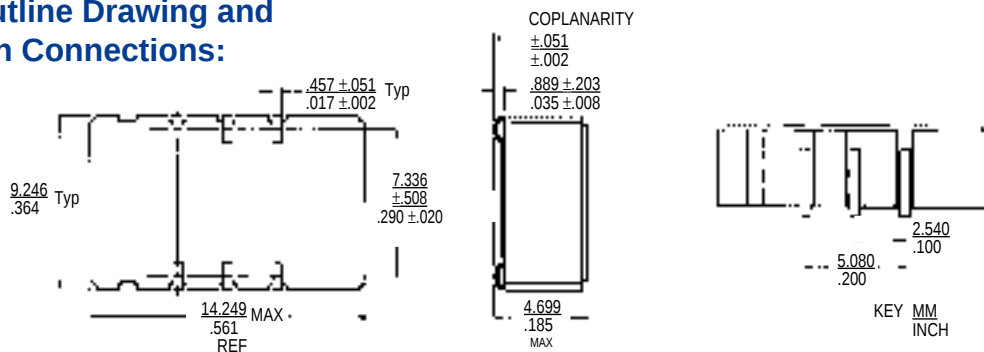
Equivalent Test Load: 5 TTL LOADS



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

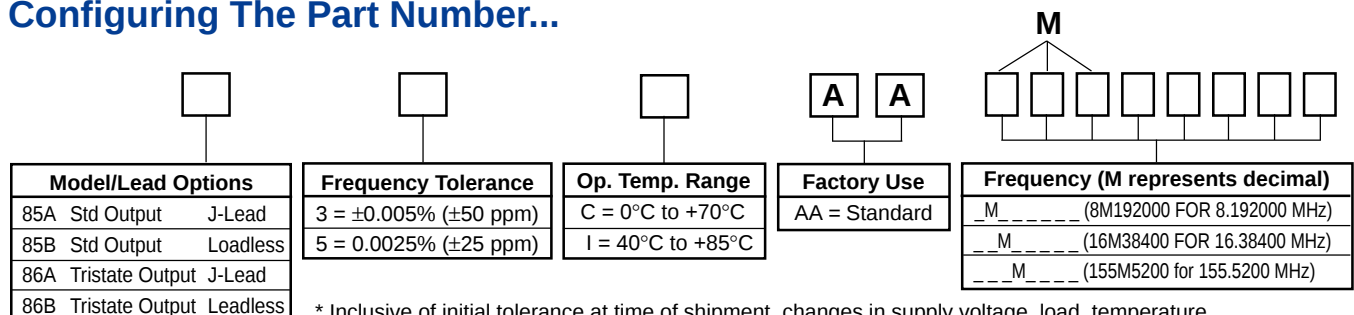
Electro-Static Discharge:

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...



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