



telephone 949 252 0522





Product Category: Crystal Oscillator

Series Number	Package	Description	Last Modified
390	14 Pin Dip 4 Leads	PECL Output	July 01 2005

#### **FEATURES**

- Wave form symmetry as low as 45/55%
- PECL output
- Industry standard 14 pin Dip
- 3.3V or 5V optional
- RoHs / Lead Free compliant





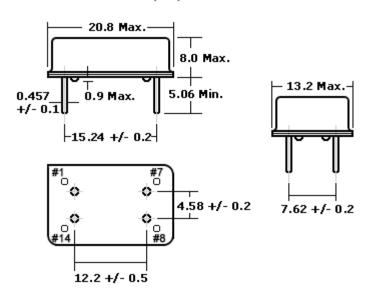
# **OPERATING CONDITIONS / ELECTRICAL CHARACTERISTICS**

PARAMETERS	CONDITIONS	CHARACTERISTICS		UNITS	
Output Logic	-	Positive ECL Square Wave (PECL)		-	
Input Voltage (VDD)	-	3.3 ±10%	5.0 ±10%	VDC	
Frequency Range (f <sub>O</sub> )	-	19.440 ~ 180.0 (Fund, Third, Fifth / UM-1)		MHz	
Operating Temperature (T <sub>OPR</sub> )	-	0 ~ +70 (Std.) / -40 ~ 85 (Option)		°C	
Storage Temperature (T <sub>STG</sub> )	-	-55 ~ <b>+1</b> 25		°C	
Overall Frequency Stability	-	±20 (0 ~ +70°C Only), ±25, ±50, ±100 max.		PPM	
	(a) Frequency Tolerance	Inclusive of Overall Stability		-	
	(b) Temperature Stability	Inclusive of Overall Stability (Operating Temperature)		-	
	(c) Input Voltage Stability	Inclusive of Overall Stability (VDD ±5%)		-	
	(d) Load Stability	Inclusive of Overall Stability (RL ±5%)		-	
Input Current (I <sub>DD</sub> )	-	80 max.	120 max.	mA	
Aging	@ 25°C	±1 max.		PPM/Y	
Rise Time (T <sub>R</sub> )	20% to 80% of Waveform	2 max.		nS	
Fall Time (T <sub>F</sub> )	20% to 80% of Waveform	2 max.		nS	
Output Voltage High "1" VOH	PECL	VDD - 1.025 min.		VDC	
Output Voltage Low "0" VOL	PECL	VDD - 1.620 max.		VDC	
Load	-	50		Ohms	
Duty Cycle	50% of Waveform	50 ±10 (Std.) / 50 ±5 (Option)		%	
Start-Up Time (T <sub>S</sub> )	-	10 max.		mS	
Jitter	RMS	3.5 max.		ps	

## PIN CONNECTIONS

#1 Complimentary Output or Tri State Enable Low or No Connection

## PACKAGE DIMENSIONS (mm)



#	7	Ground
#	8	Output
#1	14	Vdd

#### **PART NUMBER GUIDE**

Series Number	Frequency	Voltage Supply Option	Frequency Tolerance & Stability (max.)	Operating Temp. (° C)	Duty Cycle	Pin 1 Connection
390	- 28.0 M	- 5	D	N	- T	CO
Oscilent SMD Oscillators	Enter your freq. e.g. 28.0M = 28.00 MHz	5 = 5VDC 3 = 3.3VDC	D = ±100 PPM E = ±50 PPM F = ±25 PPM G = ±20 PPM	Blank* = 0~+70 N = -40~+85	Blank*= 50±10% T = -50±5%	NC = No Connection CO = Complimentary Output TS = Tri-State Enable Low

NOTE: - Deviations on all parameters available. Please consult Oscilent for details.

**DEFINITIONS:** - Click on the characteristic names above, for definitions of the particular characteristic.

\*STANDARDS: - "Blank" part number selections, indicate standard variables for the particular characteristic.

PACKAGING: - Add -TR for Tape/Reel. Click here for tape/reel specifications

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Series No.: 390

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