




**Data Sheet**



Product Category: VCXO

Series Number	Package	Description	Last Modified
554	14 Pin DIP UM-1	HCMOS / TTL	Jan. 01 2007

**FEATURES**

- Wide voltage control range
- Wave form symmetry of 40/60%
- HCMOS or TTL output
- Industry standard DIP 14 pin lead spacing
- RoHs / Lead Free compliant 

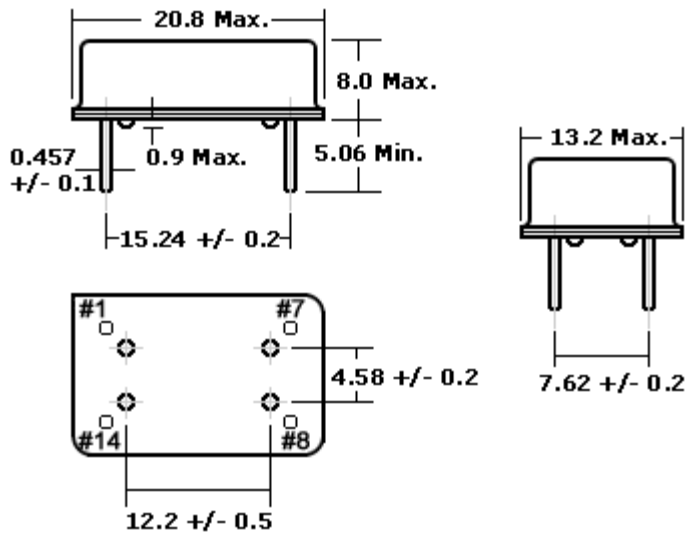


**OPERATING CONDITIONS / ELECTRICAL CHARACTERISTICS**

PARAMETERS	CONDITIONS	CHARACTERISTICS		UNITS
<b>Output Logic</b>	-	HCMOS / TTL Output		-
<b>Input Voltage (VDD)</b>	-	3.3 ±10%	5.0 ±10%	VDC
<b>Frequency Range (f<sub>O</sub>)</b>	-	1.5440 ~ 155.520		MHz
<b>Operating Temperature (T<sub>OPR</sub>)</b>	-	0 ~ +70 (Std.) / -40 ~ 85 (Option)		°C
<b>Storage Temperature (T<sub>STG</sub>)</b>	-	-55 ~ +125		°C
<b>Overall Frequency Stability</b>	a + b + c + d	±10, ±20, ±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%)		-
<b>Input Current (I<sub>DD</sub>)</b>	-	10 ~ 30 max.	15 ~ 50 max.	mA
<b>Aging</b>	@ 25°C	±1 max.		PPM/Y
<b>Rise Time (T<sub>R</sub>) / Fall Time (T<sub>F</sub>)</b>	-	8 max. (0.4V to 2.4V / TTL; 20% to 80% / HCMOS)		nS
<b>Pin 1 Control Voltage Range</b>	-	1.65 ±1.35	2.5 ±2	V
<b>Output Voltage High "1" VOH</b>	TTL Load	2.4 min.		VDC
	HCMOS Load	2.7 min.	VDD-0.5 min.	
<b>Output Voltage Low "0" VOL</b>	TTL Load	0.4 max.		VDC
	HCMOS Load	0.5 max.		
<b>Duty Cycle</b>	-	50 ±10 (Std.) / 50 ±5 (Option)		%
<b>Start-Up Time (T<sub>S</sub>)</b>	-	10 max.		ms
<b>Jitter</b>	(One Sigma)	±25 max. (< 52MHz); ±50 max. (> 52MHz)		ps
<b>Linearity</b>	-	±20 (Std.) / ±10, ±5 (Option)		%

**PIN CONNECTIONS**

**PACKAGE DIMENSIONS (mm)**



#1	Voltage Control
#7	CASE GND
#8	OUTPUT
#14	VDD

**PART NUMBER GUIDE**

Series Number	Frequency	Voltage Supply Option	Frequency Tolerance & Stability (max.)	Operating Temp. (°C)	Duty Cycle	Pulling Range	Linearity
<b>554</b>	<b>- 12.0 M</b>	<b>- 3</b>	<b>E</b>	<b>N</b>	<b>- T</b>	<b>P1</b>	<b>20</b>
Oscilent VCXO	Enter your desired frequency e.g. <b>12.0M for 12.000 MHz</b>	5 = 5VDC 3 = 3.3VDC	D = ±100 PPM E = ±50 PPM F = ±25 PPM G = ±20 PPM H = ±10 PPM	Blank* = 0~+70 N = -40~+85	Blank* = 50±10% T = 50±5%	P1 = 50PPM P2 = 100PPM P3 = 150PPM	20 = 20% 10 = 10% 05 = 5%

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

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

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

**GULL WING:** - Add **-G** for Gull Wing at end of part number

**PACKAGING:** - Standard tube packaging, add **-TR** for Tape/Reel. Click [here](#) for tape/reel specifications

**Oscilent Corporation** - CALL **949.252.0522**

**Series No.:** **554**

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