



Data Sheet



Product Category: VCXO Surface Mount

Series Number	Package	Description	Last Modified
566	6 Pad PCB SMD	HCMOS / TTL	Jan. 01 2007

## FEATURES

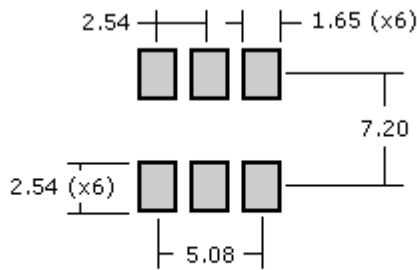
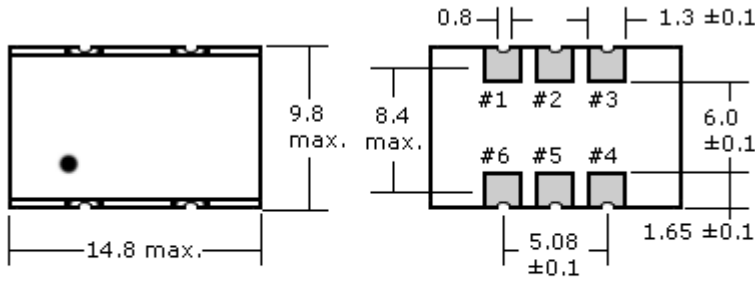
- Wave form symmetry of 40/60%
- SMD Version 6 Pad
- 3.3V operation (optional)
- Tape and Reel
- RoHs / Lead Free compliant



## OPERATING CONDITIONS / ELECTRICAL CHARACTERISTICS

PARAMETERS	CONDITIONS	CHARACTERISTICS		UNITS
Output Logic	-	HCMOS / TTL Output		-
Input Voltage (VDD)	-	3.3 ±10%	5.0 ±10%	VDC
Frequency Range (f <sub>0</sub> )	-	1.5440 ~ 52.0		MHz
Operating Temperature (T <sub>OPR</sub> )	-	0 ~ +70 (Std.) / -40 ~ 85 (Option)		°C
Storage Temperature (T <sub>STG</sub> )	-	-55 ~ +125		°C
Overall Frequency Stability	a + b + c + d	±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%)		-
Input Current (I <sub>DD</sub> )	-	10 ~ 45 max.	15 ~ 85 max.	mA
Aging	@ 25°C	±1 max.		PPM/Y
Rise Time (T <sub>R</sub> ) / Fall Time (T <sub>F</sub> )	< 66.660 MHz	10 max. (0.4V to 2.4V / TTL; Waveform / HCMOS)		nS
	> 66.660 MHz	4 max. (0.4V to 2.4V / TTL; Waveform / HCMOS)		
Pin 1 Control Voltage Range	-	1.65 ±1.35	2.5 ±2	V
Output Voltage High "1" VOH	TTL Load	2.4 min.		VDC
	HCMOS Load	2.7 min.	VDD-0.5 min.	
Output Voltage Low "0" VOL	TTL Load	0.4 max.		VDC
	HCMOS Load	0.5 max.		
Duty Cycle	-	50 ±10 (Std.) / 50 ±5 (Option)		%
Start-Up Time (T <sub>S</sub> )	-	10 max.		ms
Jitter	(One Sigma)	±25 max. (Under 52 MHz) , ±50 max. (Over 52 MHz)		ps
Linearity	-	±20 (Std.) / ±10 (Option) / Custom Spec. Avail.		%
Absolute Pull Range (APR)	-	±50, ±100, ±150 min.		PPM

**PACKAGE DIMENSIONS (mm)**



Suggested Solder Pad Layout

PIN CONNECTIONS	
#1	Control Voltage
#2	Tri-State Enable High (TS) or No Connection (NC)
#3	CASE GND
#4	OUTPUT
#5	No Connection (NC)
#6	VDD

**PART NUMBER GUIDE**

Series Number	Frequency	Voltage Supply Option	Frequency Tolerance & Stability (max.)	Operating Temp. (°C)	Duty Cycle	Pulling Range	Linearity	Pin 2 Connection
566	- 12.0 M	- 3	E	N	- T	P1	20	NC
Oscilent VCXO	Enter your desired frequency e.g. 12.0M for 12.000MHz	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%	NC = No Connection TS = Tri-State Enable High

**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.

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

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**Series No.:** 566

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