



**Data Sheet**



Product Category: SMD Oscillators

Series Number	Package	Description	Last Modified
434	5 x 3.2 SMD Ceramic	HCMOS / TTL Output	Jan. 01 2007

**FEATURES**

- Ultra Low Jitter 1pS
- Low power consumption
- Tape and Reel
- Miniature profile 5 x 3.2 x 1.0
- 3.3V or 5.0V optional
- RoHs / Lead Free compliant

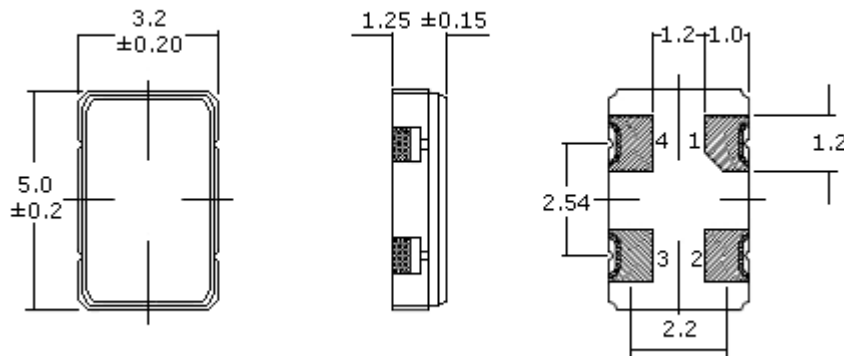


**OPERATING CONDITIONS / ELECTRICAL CHARACTERISTICS**

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>	-	0.450 ~ 100.00		MHz
<b>Operating Temperature (T<sub>OPR</sub>)</b>	-	0 ~ +70 Std. (Ext Temp Avail. See Table Below)		°C
<b>Storage Temperature (T<sub>STG</sub>)</b>	-	-55 ~ +125		°C
<b>Frequency Stability</b>	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%)		-
<b>Current Consumption</b>	-	10 ~ 45 (35) max.	15 ~ 85 (50) max.	mA
<b>Aging</b>	@ 25°C	±5 max.		ppm/Y
<b>Rise Time (T<sub>R</sub>) / Fall Time (T<sub>F</sub>)</b>	≤ 23.999 MHz	10 max.		nS
	24.00 ~ 70.00 MHz	6 max.		
	70.001 ~ 100.00 MHz	4 max.		
<b>PIN 1 Tri-State Input Voltage (Option)</b>	-	Vh (Pin 1) No Connection : Enables Output		-
	-	Vh (Vih) ≥ 2.2 Vdc : Enables Output		
	-	VI (Vil) ≤ 0.8 Vdc : Disables Output (High Impedance)		
<b>Output Voltage High "1" VOH</b>	TTL Load	2.4 min.		VDC
	HCMOS Load	Vdd * 0.9 min.		
<b>Output Voltage Low "0" VOL</b>	TTL Load	0.4 max.		VDC
	HCMOS Load	Vdd * 0.1 min.		
<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>	(12KHz to 20MHz)	RMS: ±1 max.		ps

**PIN CONNECTIONS**



**PACKAGE DIMENSIONS (mm)**

#1	No Connection or Tri-State Enable High
#2	Case Ground
#3	Output
#4	Vdd

**PART NUMBER GUIDE**

Series Number	Frequency	Voltage Supply Option	Frequency Tolerance & Stability (max.)	Operating Temp. (°C)	Duty Cycle	Pin 1 Connection
<b>434</b>	<b>- 12.0M</b>	<b>- 3</b>	<b>E</b>	<b>N</b>	<b>- T</b>	<b>TS</b>
Oscilent SMD Oscillators	Enter your desired frequency e.g. 12.0M = 12.000MHz	5 = 5VDC 3 = 3.3VDC	D = ±100 ppm E = ±50 ppm F = ±25 ppm G = ±20 ppm	Blank* = 0~+70 C = -10~+70 D = -20~+70 N = -40~+85	Blank* = 50±10% T = -50±5%	NC = No Connection TS = Tri-State Enable High
<p><b>NOTE:</b> - Deviations on all parameters available. Please consult Oscilent for details.</p> <p><b>DEFINITIONS:</b> - Click on the characteristic names above, for definitions of the particular characteristic.</p> <p><b>*STANDARDS:</b> - "Blank" part number selections, indicate standard variables for the particular characteristic.</p> <p><b>PACKAGING:</b> - Add <b>-TR</b> for Tape/Reel. Click <a href="#">here</a> for tape/reel specifications</p>						

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

**Series No.:** 434

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