OSCILENT Corporation **Data Sheet**

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BACK

Product Category: SMD Oscillators

Series Number	Package	Description	Last Modified
420	Plastic J-Lead	HCMOS / TTL Output	Jan. 01 2007

FEATURES

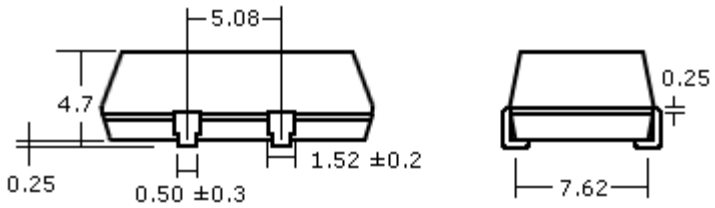
- Low Jitter
- Extended temperature range capabilities
- Tape and Reel
- Tri-State enable / disable
- 5V or 3.3V optional
- RoHs / Lead Free compliant

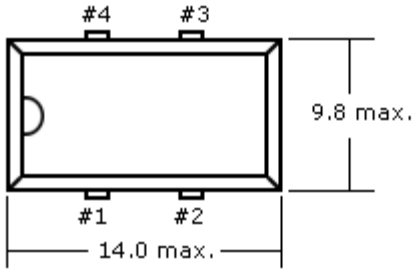


OPERATING CONDITIONS / ELECTRICAL CHARACTERISTICS

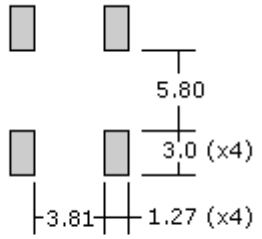
PARAMETERS	CONDITIONS	CHARACTERISTICS		UNITS
Output Logic	-	HCMOS / TTL Output		-
Input Voltage (VDD)	-	3.3 ±10%	5.0 ±10%	VDC
Frequency Range (f_O)	-	1.0 ~ 150.000		MHz
Operating Temperature (T_{OPR})	-	0 ~ +70 Std. (Ext Temp Avail. See Table Below)		°C
Storage Temperature (T_{STG})	-	-55 ~ +125		°C
Frequency Stability	a + b + c + d	±50, ±100 max. (Tighter Stability Avail.)		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 ±10%)		-
	(d) Load Stability	Inclusive of Overall Stability (RL ±5%)		-
Input Current (I_{DD})	-	10 ~ 35 max.	23 ~ 50 max.	mA
Aging	@ 25°C	±5 max.		ppm/Y
Rise Time (T_R) / Fall Time (T_F)	-	8 max. (0.4V to 2.4V w/ TTL, 20% ~ 80% / HCMOS)		nS
PIN 1 Tri-State	-	Option		-
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_S)	1~ 26 MHz	4 max.		mS
	26 ~ 66.667 MHz	10 max.		
Jitter (RMS)	1.000 ~ 50.000 MHz	±10 max.		ps
	50.100 ~ 79.900 MHz	±5 max.		
	80.000 ~ 150.000 MHz	±3 max.		

PACKAGE DIMENSIONS (mm)





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



Suggested Solder Pad Layout

PART NUMBER GUIDE

Series Number	Frequency	Voltage Supply Option	Frequency Tolerance & Stability (max.)	Operating Temp. (° C)	Duty Cycle	Pin 1 Connection
420	- 12.0M	- 3	E	N	- T	TS
Oscilent SMD Oscillators	Enter your desired frequency e.g. 12.0M = 12.000MHz See table below for standard frequencies.	5 = 5VDC 3 = 3.3VDC	D = ±100 PPM E = ±50 PPM	Blank* = 0~+70 C = -10~+70 D = -20~+70 N = -40~+85	Blank*= 50±10% T = -50±5%	NC = No Connnection 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 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

PART NUMBER CODING - STANDARD OSCILLATOR FREQUENCIES

FREQUENCY (1.0 ~ 15.9744 MHz)	FREQUENCY (16.0 ~ 66.666 MHz)
1.0	16.0
1.2288	16.257
1.8432	16.384
2.0	17.734475
2.4576	18.0
3.579545	18.432

3.6864	19.6608
4.0	20.0
4.9152	24.0
5.0	24.576
5.0688	25.0
6.0	25.175
6.144	28.322
7.3728	30.0
8.0	32.0
9.216	32.514
9.8304	33.0
10.0	35.0
11.0592	40.0
12.0	48.0
12.288	50.0
12.8	64.000
14.31818	65.0
14.7456	66.666
15.9744	-
NOTE: **Other frequencies available. Please consult Oscilent for part numbers**	

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Series No.: 420