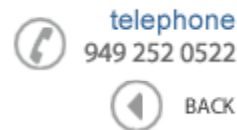




Data Sheet



Product Category: TXCO

Series Number	Package	Description	Last Modified
511 ~ 514	14 Pin DIP Low Profile	HCMOS / TTL / Clipped Sine	Jan. 01 2007

FEATURES

- High stable output over wide temperature range
- 4.7mm height max low profile TCXO
- Industry standard DIP 14 pin lead spacing
- RoHs / Lead Free compliant



OPERATING CONDITIONS / ELECTRICAL CHARACTERISTICS

PARAMETERS	CONDITIONS	511	512	513	514	UNITS
Output	-	TTL	HCMOS	Clipped Sine	Compatible*	-
Frequency Range	fo	1.20 ~ 100.00		9.60 ~ 35.00	1.20 ~ 100.00	MHz
Output	Load	10TTL Load or 15pF HCMOS Load Max.		10K ohm // 10pF	-	-
	Level	High	2.4 VDC min.	VDD -0.5 VDC min.	1.0 Vp-p min.	-
		Low	0.4 VDC max.	0.5 VDC max.		
Frequency Stability	Vs. Temp Range	See Table 1				-
	Vs. Input Voltage (5%)	±0.5 max.				PPM
	Vs. Load	±0.3 max.				PPM
	Vs. Aging (@+25°C)	±1.0 per year				PPM
Input	Voltage	+5.0 ±5% / +3.3 ±5%				VDC
	Current	20 max. / 40 max.		3 max.	-	mA
Frequency Adjustment	-	±3.0 min.				PPM
Rise Time / Fall Time	-	10 max.		-	-	nS
Duty Cycle	-	50 ±10% max.		-	-	-
Storage Temperature	(TSTG)	-40 ~ +85				°C
Voltage Control Range	-	2.5 VDC ±2.0 Positive Transfer Characteristic				-

*Compatible (514 Series) meets TTL and HCMOS mode simultaneously

TABLE 1 - FREQUENCY STABILITY - TEMPERATURE TOLERANCE

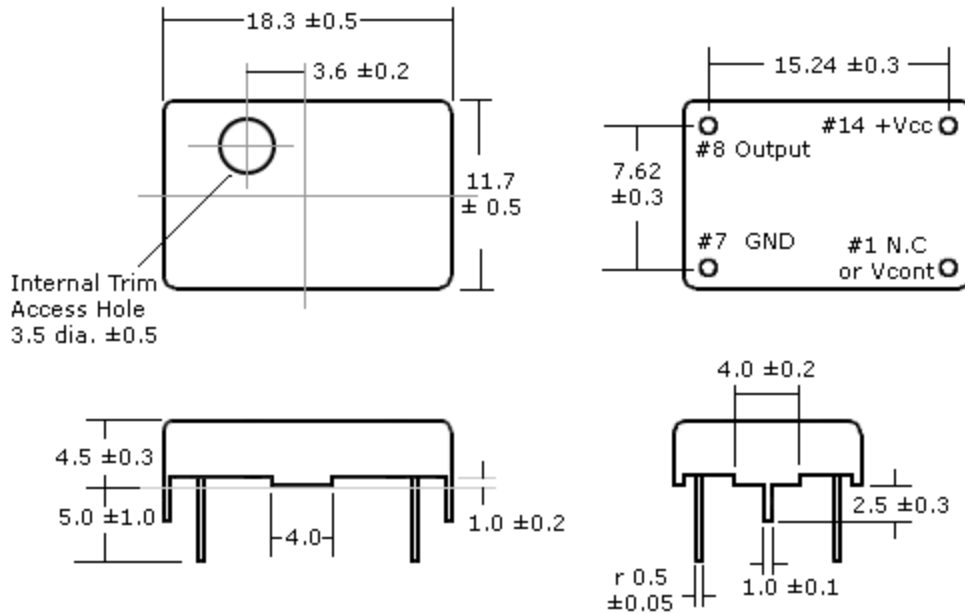
P/N Code	Temperature Range	Frequency Stability (PPM)							
		1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0
A	0 ~ +50°C	x	x	x	x	x	x	x	x
B	-10 ~ +60°C	x	x	x	x	x	x	x	x
C	-10 ~ +70°C	O	x	x	x	x	x	x	x
D	-20 ~ +70°C	O	x	x	x	x	x	x	x
E	-30 ~ +60°C		O	x	x	x	x	x	x
F	-30 ~ +70°C		O	x	x	x	x	x	x
G	-30 ~ +75°C			x	x	x	x	x	x

x	available all Frequency
O	avail up to 25MHz only

H	-40 ~ +80°C					x	x	x	x
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*Other Temperature and Frequency Stabilities may be available. Check with Oscilent for details.

PACKAGE DIMENSIONS (mm)



PART NUMBER GUIDE

Series Number	Frequency	Voltage Supply Option	Frequency Stability (max.)	Operating Temp. (°C)	Frequency Deviation
512	- 4.0 M	- 3	45	D	- 5
Oscilent 511 = TTL 512 = HCMOS 513 = Clipped Sine Wave 514 = Compatible	Enter your desired frequency e.g. 12.0M = 12.000MHz	5 = 5VDC 3 = 3.3VDC	10 = ±1.0 PPM 15 = ±1.5 PPM 20 = ±2.0 PPM 25 = ±2.5 PPM 30 = ±3.0 PPM 35 = ±3.5 PPM 40 = ±4.0 PPM 45 = ±4.5 PPM 50 = ±5.0 PPM	A = 0 ~ +50 B = -10 ~ +60 C = -10 ~ +70 D = -20 ~ +70 E = -30 ~ +60 F = -30 ~ +70 G = -30 ~ +75 H = -40 ~ +80	NC = No Connection (TCXO) 01 = ±1 PPM min. 05 = ±5 PPM min. 10 = ±10 PPM min.

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: - Add **-TR** for Tape/Reel. Click [here](#) for tape/reel specifications

Oscilent Corporation - CALL **949.252.0522**

Series No.: 511 to 514

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