

CLOCK OSCILLATOR: T4000 Series Ultra Miniature Clock

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CLOCK OSCILLATORS

T4000 Series Clock Oscillator

Ultra-Miniature, Low Profile, SMD



Features:

- ◆ 32.768 kHz Available
- ◆ Low Current Drain
- ◆ Ceramic SMD package
- ◆ Tape and Reel Available

Model: T4000 Series Specifications

Parameter	Unit	Min.			Max.		
		3.3V	2.5V	1.8V	3.3V	2.5V	1.8V
Frequency Range	MHz	1.00	0.032768	0.032768	160.00	160.00	160.00
Operating Temperature Range	°C	See Table					
Frequency Stability (1)	ppm	See Table					
Supply Current							
1.00MHz < 35.00MHz	mA	-	-	-	16	10	8
35.00MHz < 60.00MHz	mA	-	-	-	25	20	15
60.00MHz < 100.00MHz	mA	-	-	-	40	30	25
100.00MHz < 106.25MHz	mA	-	-	-	50	40	35
106.25MHz < 160.00MHz	mA	-	-	-	30	40	35
Waveform		CMOS					
Load	pF	15					
Duty Cycle		50% ±10%					
Output Voltage							
Logic Low	V	90%	90%	90%	-	-	-
Logic High	V	-	-	-	10%	10%	10%
Transition Times (Rise/Fall)	nSec	-	-	-	10	10	10
Aging per year	ppm	-	-	-	±5	±5	±5
Storage Temperature	°C	-55 to 125					
Tri-State		Pin 1					
Enable	V	0.7	0.7	0.7	-	-	-
Disable	V	-	-	-	0.3	0.3	0.3
Start Up Time	mSec	-	-	-	10	10	10
RMS Phase Jitter (12 kHz to 20 MHz)	pSec	-	-	-	1	1	1
Period Jitter: pk-pk	pSec	-	-	-	100	100	100
Period Jitter: One Sigma	pSec	-	-	-	25	25	25

(1) Inclusive of calibration @ 25°C, operating temperature, Input voltage change, load change, shock, and vibration. Tighter stabilities available- contact Factory.

Temperature	Stability (ppm)
0 to 70°C	±20, ±25, ±50, ±100
-20 to 70°C	±20, ±25, ±50, ±100
-40 to 85°C	±50, ±100

