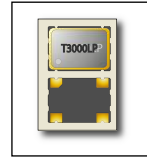


# T3000LP Crystal Oscillator



## FEATURES:

**Tri-state Enable  
Ceramic Package**

**Low Voltage  
7.0 x 5.0 x 1.4 mm**

Parameter	Unit	Min.	Max.
Frequency Range	MHz	1.000	166.000
Frequency Stability	ppm	See Table	
Storage Temperature Range	°C	-55	+125
Voltage	V	1.8, 2.8, 3.3 ±5%	
Current Consumption	mA	See Table	
Output Waveform		CMOS	
Output Load	pF	-	15
Output Voltage Logic High (VOH)	V	90% of VDD	-
Output Voltage Logic Low (VOL)	V	-	10% of VDD
Transition Time (Rise and Fall)	nSec	-	5
Duty Cycle		45/55% standard	
Tri-state	Enable Output	No Connection Pin 1	
	Enable Output	V	0.7 of VDD
	Disable Output	V	0.3 of VDD
Start-up Time	mSec	-	5
Standby Current	µA	-	10
Phase Jitter: (Integrated 12 kHz-20 MHz)	pSec	-	1
Period Jitter: Absolute	p Sec	-	40

Maximum frequency for 3.3 V is 166.00 MHz; Maximum frequency for 2.5 V is 133.00 MHz; Maximum frequency for 1.8 V is 125.00 MHz.  
Frequency Stability is inclusive of calibration at 25°C, operating temperature range, input voltage variation, load variation, shock, vibration, and aging.

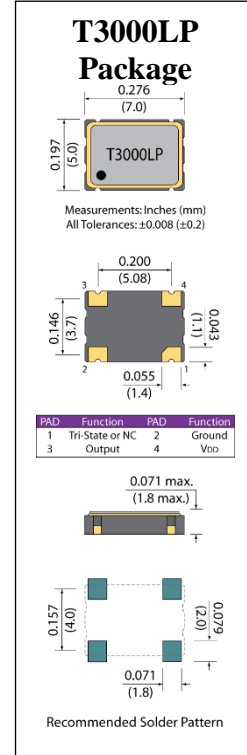
## Current Consumption

Frequency Range	Unit	3.3 V	2.8 V	1.8 V
1.00 to 30.00 MHz	mA	10	8	7
>30.00 to 75.00 MHz	mA	20	18	15
>75.00 to 125.00 MHz	mA	35	30	25
>125.00 to 166.00 MHz	mA	45	40	-

Maximum specified limit

## Frequency Stability

Temperature	Stability (ppm)
-10 to +60°C	±20, ±25, ±30, ±50
-20 to +70°C	±25, ±30, ±50
-40 to +85°C	±25, ±30, ±50



## Environmental

Terminal Material	W
Terminal Plating	Ni-Au
REACH Compliant	Yes
RoHS Compliant	Yes
RoHS Exemptions	No
Re-flow Temp. Max.	260°C
MSL	1

**Example Part Number: T3000LP-18-A-27-24M576**

T3000LP	1	2	3	4
	<b>Voltage</b>	<b>Stability</b>	<b>Temp. Range</b>	<b>Frequency</b>
	33= 3.3 V	A= ±50	16= -10 to +60°C	Frequency in MHz
	28= 2.8 V	B= ±30	27= -20 to +70°C	i.e. 24M576
	18= 1.8 V	C= ±25	48= -40 to +85°C	use M for decimal point
		D= ±20		

Note: Consult factory for additional potential options not listed.