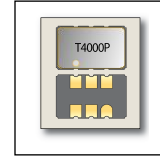


T4000P

Crystal Oscillator



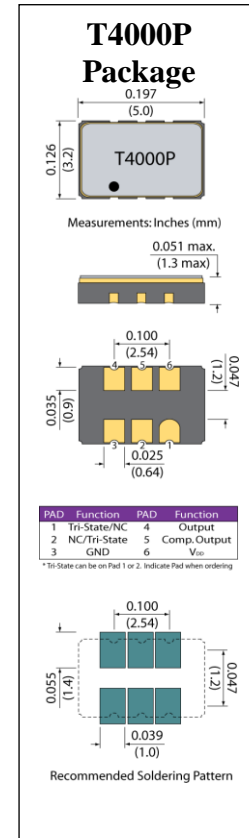
FEATURES:
Programmable
Ceramic Package

Quick Delivery
5.0 x 3.2 x 1.3 mm

Parameter	Unit	Min.	Max.
Frequency Range	MHz	1.000	200.000
Frequency Stability	ppm	See Table	
Storage Temperature Range	°C	-55	+125
Supply Voltage	V	1.8, 2.5, 3.3 ±10%	
Current Consumption	mA	See Table	
Output Waveform		CMOS	
Output Load	pF	-	15
Output Voltage Logic High (VOH)	V	90% of V _{DD}	-
Output Voltage Logic Low (VOL)	V	-	10% of V _{DD}
Transition Time (Rise and Fall)		See Table	
Duty Cycle		45/55% standard	
Tri-state	Enable	No Connection PIN 1	
	Enable	V	70% of V _{DD}
	Disable	V	30% of V _{DD}
Start-up Time	mSec	-	2
Standby Current	µA	-	15
Period Jitter Integrated		-	1
	1.000 MHz to 40.000 MHz	pSec	40
	Over 40.000 MHz	pSec	200

Maximum frequency for 3.3 V is 200.000 MHz; Maximum frequency for 2.5 V is 166.000 MHz; Frequency Range for 1.8 V is 100.000 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	3.3V	2.5 V	1.8V
1.000 to 30.000 MHz	mA	10	8	6
>30.000 to 75.000 MHz	mA	15	10	8
>75.000 to 133.000 MHz	mA	20	15	12
>133.000 to 166.000 MHz	mA	22	15	-
>166.000 to 200.000 MHz	mA	25	-	-

Maximum specified limit

Frequency Stability

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

Transition Time (Rise and Fall)

Frequency Range	Unit	3.3V	2.5 V	1.8V
1.000 to 10.000 MHz	nSec	3	4	5
>10.000 to 200.000 MHz	nSec	2	3	4

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: T5000P-18-A-27-24M576

T5000P	1	2	3	4
	Voltage	Stability	Temp. Range	Frequency
	18= 1.8 V	A= ±50	16= -10 to 60°C	Frequency in MHz
	25= 2.5 V	B= ±30	27= -20 to 70°C	i.e. 24M576
	33= 3.3 V	C= ±25	48= -40 to 85°C	use M for decimal point
		D= ±20		

Note: Consult factory for additional potential options not listed.