



Clock Oscillators

T6000ET Series

Ceramic, SMD



Features:

- ❖ Extended Temperature Range
- ❖ 2.5 x 2.0 x 0.9 mm
- ❖ Ceramic Package
- ❖ Low Jitter

Parameter	Unit	Min.	Max.
Frequency Range	MHz	1.25	100.00
Frequency Stability			
-40 to 85°C	ppm	±30, ±50	
-40 to 105°C	ppm	±30, ±50	
-40 to 125°C	ppm	±40, ±50	
Storage Temperature Range	°C	-55	+125
Supply Voltage	V	1.8, 2.5, 3.3 ±5%	
Current Consumption	mA	See Table	
Output Waveform		CMOS	
Output Load	pF	-	15
Output Voltage Logic High (V _{OH})	V	90% of V _{DD}	
Output Voltage Logic Low (V _{OL})	V	-	10% of V _{DD}
Transition Time (Rise and Fall)		See Table	
Duty Cycle		45/55% standard	
Tri-State		Pad 1	
Enable	V	70% of V _{DD}	-
Disable	V	-	30% of V _{DD}
Start Up Time	mSec	-	2
Absolute Period Jitter	pSec	-	40
Period Jitter: Integrated (12 kHz to 20MHz)	pSec	-	1

Frequency Stability is inclusive of Operating Temperature Range, Supply Voltage, Aging, Current and Load.

Current Consumption Maximum specified limit

Frequency Range	Unit	3.3 V	2.5 V	1.8 V
1.00 to 30.00 MHz	mA	10	8	6
>30.00 to 75.00 MHz	mA	15	10	8
>75.00 to 133.00 MHz	mA	20	15	12
>133.00 to 166.00 MHz	mA	22	15	-
>166.00 to 200.00 MHz	mA	25	-	-

Transition Time (Rise and Fall) Maximum specified limit

Frequency Range	Unit	3.3 V	2.5 V	1.8 V
1.00 to 10.00 MHz	nSec	10	8	5
>10.00 to 200.00 MHz	nSec	15	10	4

T6000ET Package

Measurements: Inches (mm)
All tolerances: ±0.008 (±0.2)

Recommended Solder Pattern

PAD	Function	PAD	Function
1	Tri-State or NC	2	Ground
3	Output	4	V _{DD}

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