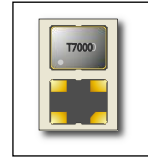


# T7000 Crystal Oscillator



**FEATURES:**  
Ultra-Miniature  
Ceramic Package

**Tight Stability**  
**2.0 x 1.6 x 0.65 mm**

Parameter	Unit	Min.	Max.
Frequency Range	MHz	1.000	50.000
Frequency Stability	ppm	See Table	
Storage Temperature Range	°C	-55	+125
Voltage	V	1.8, 2.8, 3.3 ±10%	
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)	n Sec	3	5
Duty Cycle		45/55% standard	
Tri-state			
Enable	V	0.7 of VDD	-
Disable	V	-	0.3 of VDD
Start-up Time	m Sec	-	2
Standby Current	µA	-	10
Phase Jitter: (Integrated 12kHz-20MHz)	pSec	-	1
Period Jitter: Absolute	p Sec	-	40

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	2.5	1.8
1.000 to 50.000 MHz	mA	15	10	7

Maximum specified limit

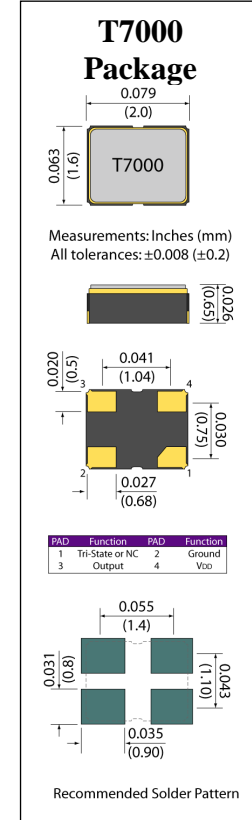
### Transition Time (Rise and Fall)

Frequency Range	Unit	3.3	2.5	1.8
1.000 to 20.000 MHz	mA	3	4	5
>20.000 to 50.000 MHz	mA	2	3	2

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:** T7000-18-A-27-24M576

T7000	-	[ ]	-	[ ]	-	[ ]	-	[ ]
		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				