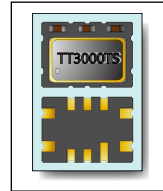


# TT-VT3000-TS Crystal Oscillator



**FEATURES:**  
Stratum III  
Ceramic Package

**CMOS and Clipped Sine**  
**7.0 x 5.0 x 1.9 mm**

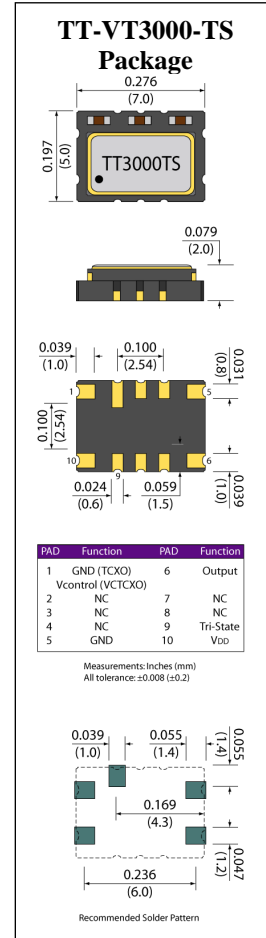


Parameter	Unit	Min.	Max.
Frequency Range	MHz	5	26
Frequency Tolerance (Overall, 20 Years)	ppm	-	±4.6
Frequency Stability			
Holdover	ppm	-	±0.5
Storage Temperature Range	°C	-55	+125
Current Consumption (CMOS)	mA	-	6
Current Consumption (Clipped Sine)	mA	-	3.5
Load (CMOS)	pF		15
Load (Clipped Sine)			10 KOhms//10pF
Output Level (CMOS)	V	90%	10%
Output Level (Clipped Sine)	V p-p	0.8	-
Duty Cycle (CMOS only)	%		45/55
Voltage			3.3, 5.0 ±5%
Output Level	Vp-p	0.8	-
Load			10KOhms//10pF
Control Voltage Range (VCTCXO)	V		See Table
Frequency Deviation (VCTCXO)	ppm	±5	±10
VC Input Impedance (VCTCXO)	KOhms	100	-
Start-up Time	mSec	-	2
Phase Noise			
	@ 1 kHz	dBc/Hz	-145 typical

Overall Stability including frequency tolerance @ 25°C. vs. supply voltage, vs. load, reflow soldering, 20 years of aging, and frequency stability over temperature range.  
Holdover Stability including 24 hours of aging, vs. supply voltage, and frequency stability over temperature range.

### Frequency Stability vs. Temperature Range

Temperature	Stability (ppm)
-10 to 60°C	±0.14, ±0.2, ±0.28, ±0.5
-20 to 70°C	±0.14, ±0.2, ±0.28, ±0.5
-40 to 85°C	±0.28, ±0.5



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### 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:** VT3000-TS-A-18-A-27-24M576

VT3000-TS	1	2	3	4	5
<b>Stability</b>	A = ±0.5	B = ±0.28	C = ±0.2	D = ±0.14	
<b>Voltage</b>	30= 3.0 V	25= 2.5V	18= 1.8V		
<b>Pull Range</b>	A = ±10	B = ±8	C = ±5	T = TCXO	
<b>Temp. Range</b>	16= -10 to 60°C	27= -20 to 70°C	48= -40 to 85°C		
<b>Frequency</b>	Frequency in MHz i.e. 24M576 use M for decimal point				