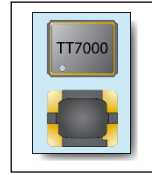


# TT-VT7000 Crystal Oscillator



**FEATURES:**  
Clipped Sine  
Ceramic Package

**Low Voltage**  
**2.0 x 1.6 x 0.8 mm**

Parameter	Unit	Min.	Max.
Frequency Range	MHz	13	52
Frequency Tolerance at 25°C	ppm	-	±0.5
Frequency Stability			
Vs. Supply Voltage (±5%) change	ppm	-	±0.5
Vs. Load (±10%) change	ppm	-	±0.2
Vs. Aging	ppm	-	±1.0
Current Consumption	mA	-	2.0
Storage Temperature Range	°C	-55	+125
Voltage		1.8, 2.5, 3.0 ±5%	
Output Waveform		Clipped Sine	
Output Level	Vp-p	0.8	-
Load		10 KOhms/10 pF	
Control Voltage Range (VCTCXO)	V	See Table	
Frequency Deviation (VCTCXO)	ppm	±5	±15
VC Input Impedance (VCTCXO)	KOhms	500	-
Start-up Time	mSec	-	2
Phase Noise			
	@ 1 kHz	dBc/Hz -135 typical	

### TT-VT7000 Package

Measurements: Inches (mm)  
Tolerances: ±0.004 (±0.1)

PAD	Function	PAD	Function
1	GND/NC (TCXO)	2	GND
3	Vcontrol (VCTCXO)	4	V <sub>DD</sub>

### Frequency Stability vs. Temperature Range

Temperature	Stability (ppm)
-10 to 60°C	±0.5, ±1.0, ±1.5, ±2.0, ±2.5
-20 to 70°C	±0.5, ±1.0, ±1.5, ±2.0, ±2.5
-40 to 85°C	±1.0, ±1.5, ±2.0, ±2.5

### Control Voltage

V	Min.	Max.
3.0	0.5	2.5
2.5	0.4	2.4
1.8	0.3	1.5

### 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:** VT7000-A-18-A-27-24M576

VT7000	-	<input type="text"/>	-	<input type="text"/>	-	<input type="text"/>	-	<input type="text"/>	-	<input type="text"/>
		1		2		3		4		5
		<b>Stability</b>		<b>Voltage</b>		<b>Pull Range</b>		<b>Temp. Range</b>		<b>Frequency</b>
		A = ±2.5		30= 3.0 V		A = ±15		16= -10 to 60°C		Frequency in MHz
		B = ±2.0		25= 2.5 V		B = ±10		27= -20 to 70°C		i.e. 24M576
		C = ±1.5		18= 1.8 V		C = ±8		48= -40 to 85°C		use M for decimal
		D = ±1.0				D = ±5				point
		E = ±0.5				T = TCXO				