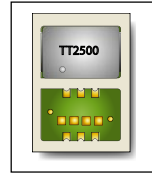


TT-VT2500 Crystal Oscillator



FEATURES:

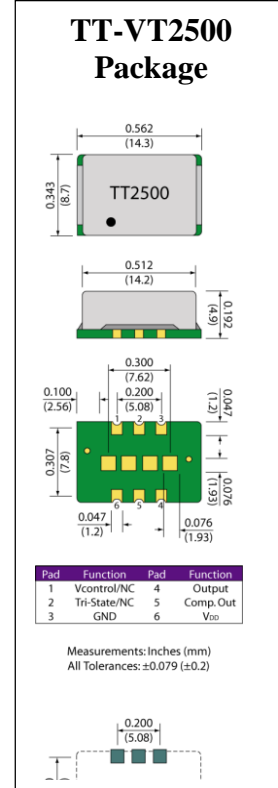
Tight Stability

SMD Metal Can

CMOS and Clipped Sine

14.3 x 8.7 x 4.9 mm

Parameter	Unit	Min.	Max.
Frequency Range	MHz	5	40
Frequency Tolerance at 25°C	ppm	-	±2.0
Frequency Stability			
Vs. Supply Voltage (±5%) change	ppm	-	±0.3
Vs. Load (±10%) change	ppm	-	±0.2
Vs. Aging	ppm	-	±1.0
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	
Frequency Adjustment (Trimmer)	ppm	±3.0	-
Control Voltage Range (VCTCXO)	V	0.5	2.5
Frequency Deviation (VCTCXO)	ppm	±5	±10
Rise and Fall Time (CMOS Only)	ns	-	4
Phase Noise @ 1 kHz	dBc/Hz	-140 typical	
Tri-state			
Enable	V	70%	
Disable	V		30%
Start-up Time	mSec	-	2



Frequency Stability vs. Temperature Range

Temperature	Stability (ppm)
-10 to 60°C	±0.05, ±0.1, ±0.14, ±0.2, ±0.28, ±0.5
-20 to 70°C	±0.1, ±0.14, ±0.2, ±0.28, ±0.5
-40 to 85°C	±0.28, ±0.5



Environmental

Terminal Material	KOVAR
Terminal Plating	Sn-Ag-Cu
REACH Compliant	Yes
RoHS Compliant	Yes
RoHS Exemptions	No
Re-flow Temp. Max.	260°C
MSL	1

Example Part Number: VT25000-A-18-A-27-24M576

VT25000	1	2	3	4	5
	Stability	Voltage	Pull Range	Temp. Range	Frequency
	A = ±0.5	50= 5.0 V	A = ±10	16= -10 to 60°C	Frequency in MHz
	B = ±0.28	33= 3.3V	B = ±8	27= -20 to 70°C	i.e. 24M576
	C = ±0.14		C = ±5	48= -40 to 85°C	use M for decimal
	D = ±0.1		T= TCXO		point
	E = ±0.05				