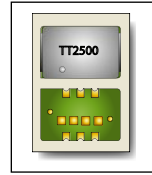


# TT-VT2500

## TCXO/VCTCXO



### FEATURES:

**Tight Stability**

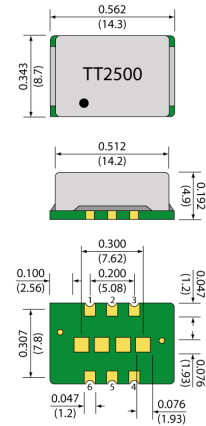
**SMD Metal Can**

**CMOS and Clipped Sine**

**14.3 x 8.7 x 4.9 mm**

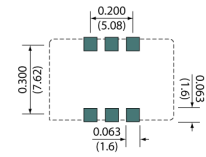
Parameter	Unit	Min.	Max.
Frequency Range	MHz	5	40
Frequency Tolerance at 25°C	ppm	-	±2.0
Frequency Stability			
vs. Supply Voltage (±5%) change	ppm	-	±0.3
vs. Load (±10%) change	ppm	-	±0.2
vs. Aging	ppm	-	±1.0
Storage Temperature Range	°C	-55	+125
Current Consumption (CMOS)	mA	-	6
Current Consumption (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

### TT-VT2500 Package



Pad	Function	Pad	Function
1	Vcontrol/NC	4	Output
2	Tri-State/NC	5	Comp. Out
3	GND	6	V <sub>DD</sub>

Measurements: Inches (mm)  
All Tolerances: ±0.079 (±0.2)



### 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: VT2500-A-C-18-A-27-24M576

VT2500	-		-		-		-		-	
	1	2	3	4	5	6				
	Stability	Waveform	Voltage	Pull Range	Temp. Range	Frequency				
A	= ±0.5	S = Clipped Sine	50 = 5.0 V	A = ±10	16 = -10 to 60°C	Frequency in				
B	= ±0.28	C = CMOS	3.3 = 3.3 V	B = ±8	27 = -20 to 70°C	MHz i.e.				
C	= ±0.14			C = ±5	48 = -40 to 85°C	24M576 use				
D	= ±0.1			T = TCXO		M for decimal				
E	= ±0.05					point				