

TE-Type Voltage Controlled Temperature Compensated Crystal Oscillator

RoHS Compliant Optional

FEATURE

1. Frequency vs temperature: $\pm 1.0\text{ppm}$ @ $-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$.
2. Pulling: $\pm 20\text{ppm}$ max.
3. Aging: $\pm 1\text{ppm/year}$.
4. TTL/ CMOS output.
5. Good Phase Noise.
6. Stratum 3 (Optional).



ORDERING INFORMATION

T	E	T	A	D	C	J			A	N	L	-	?
TCXO	Package (mm)	Supply Voltage(V) & Pin Form	Pulling range (ppm)	Freq. Stability (PPM)	Temp. Range ($^{\circ}\text{C}$)	Output Logic and Symmetry			Oscillator Mode	Appearance	Marking	Dash	Freq. (MHz)
	18.5x12.0	Through Hole T:5.0 E:2.8~3.3	A: ± 5 B: ± 8 C: ± 10 D: ± 12 E: ± 15 F: ± 20 T: TCXO	A: ± 0.5 B: ± 1.0 P: ± 1.5 C: ± 2.0 D: ± 2.5 E: ± 3.0 F: ± 4.0 G: ± 5.0	W: $0 \sim +55$ C: $-10 \sim +60$ I: $0 \sim +70$ E: $-20 \sim +70$ H: $-30 \sim +75$ U: $-40 \sim +85$	10TTL 15pF CMOS 15pF CMOS 50pF	50 \pm 5% A J F	50 \pm 10% B K G	A: AT Fundamental T: AT3 rd Overtone	N : Normal	L: Laser Marking F: Laser Marking (RoHS compliant standard)		xx.xxxxxx

Ordering example: **TETADCJANL-10.000000**

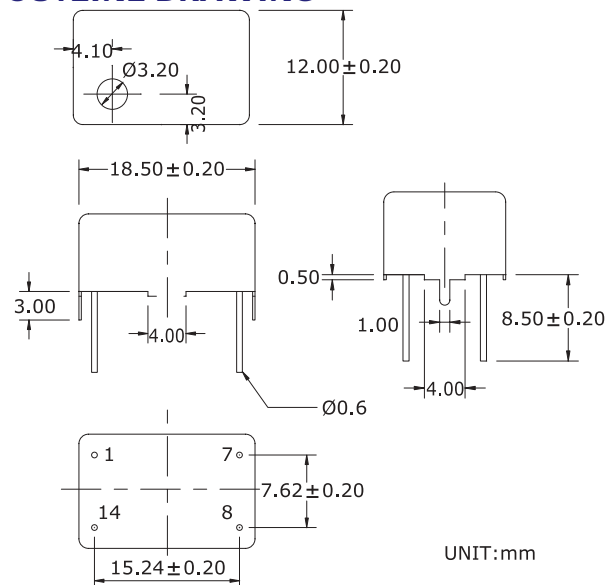
VCTCXO E-TYPE VCC: 5V, Frequency Stability: $\pm 2.5\text{ppm}$, -10°C to $+60^{\circ}\text{C}$. Pulling range: $\pm 5\text{ppm}$; CMOS 15pF Duty: $50 \pm 5\%$. AT fundamental, Laser Marking, Freq. 10.0MHz

FREQ. STABILITY vs. TEMP. RANGE

Temp.($^{\circ}\text{C}$)	PPM	A: ± 0.5	B: ± 1.0	P: ± 1.5	C: ± 2.0	D: ± 2.5
W 0 ~ +55		Δ	\circ	\circ	\circ	\circ
C -10 ~ +60		X	\circ	\circ	\circ	\circ
E -20 ~ +70		X	\circ	\circ	\circ	\circ
U -40 ~ +85		X	\circ	\circ	\circ	\circ

\circ : Standard Δ : Available (case by case) \times : Not available

OUTLINE DRAWING



PIN	Function
#1	VC / NC
#7	GND
#8	OUTPUT
#14	VCC

VCTCXO / TCXO

ELECTRICAL SPECIFICATION

Parameter	Min.		Max.		Unit
		5.0	2.8	5.0	2.8
Supply Voltage Variation(VDD) 5%	4.75	2.66	5.25	2.94	V
Frequency Range	1.250		51.840		MHz
Operating Temp. Range	Refer to Ordering Information				°C
Frequency Stability	Refer to Ordering Information				ppm
Frequency Stability					
Vs Supply Voltage(±5%) change	—		±0.2		ppm
Vs Load(±10%) change	—		±0.2		ppm
Vs Aging	—		±1.0		ppm/year
Supply Current					
1.2500MHz ≤ Fo < 10.000MHz	—		15	10	mA
10.000MHz ≤ Fo < 15.000MHz	—		20	15	
15.000MHz ≤ Fo < 26.000MHz	—		25	20	
26.000MHz ≤ Fo < 36.000MHz	—		30	25	
36.000MHz ≤ Fo < 51.840MHz	—		37	32	
Output Level (TTL/CMOS)					
High Level("1")	90% Vcc or 2.4V		—		V
Low Level("0")	—		10% Vcc or 0.4V		V
Duty	40%		60%		
Vc Input impedance	100				Kohm
Phase noise @13.0MHz					
100Hz			-115		dbc/Hz
1KHz			-138		
10KHz			-150		
Start Time	—		2		mSec
Storage Temp. Range	-55		125		°C