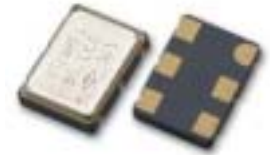


VT Type Multiplier Voltage Controlled Crystal Oscillator

RoHS Compliant Standard



Actual Size

FEATURE

1. Typical 7.0 x 5.0 x 1.6mm 6 Pads ceramic SMD package.
2. Tight symmetry (45 to 55%) available.
3. Packing: Tape & Reel, 1000/3000 pcs per Reel, 1~99 pcs per Bulk/Tape.

ORDERING INFORMATION

V	T	E	M	P	C	J	-	N	F	-	?	
VCXO	Package (mm)	Supply Voltage (V)	Tri-State Function	Freq. Stability / Pulling Range (ppm)	Temp. Range (°C)	Output Logic and Symmetry		Dash	Appearance	Lead Free	Dash	Freq. (MHz)
	7x5	E: 3.3	M: Multiplier Frequency with Tri-state to Pin2	M: ±25/±100 P: ±50/±100	I: -10~+60 C: -20~+70 L: -40~+85	50±5%	50±10%		N: Normal	F: RoHS Compliant		xx.xxxxxx
						CMOS 15pF	J	K				
						CMOS 50pF	F	G				

Ordering Example: VTEMPCJ-NF-90.000000 MHz

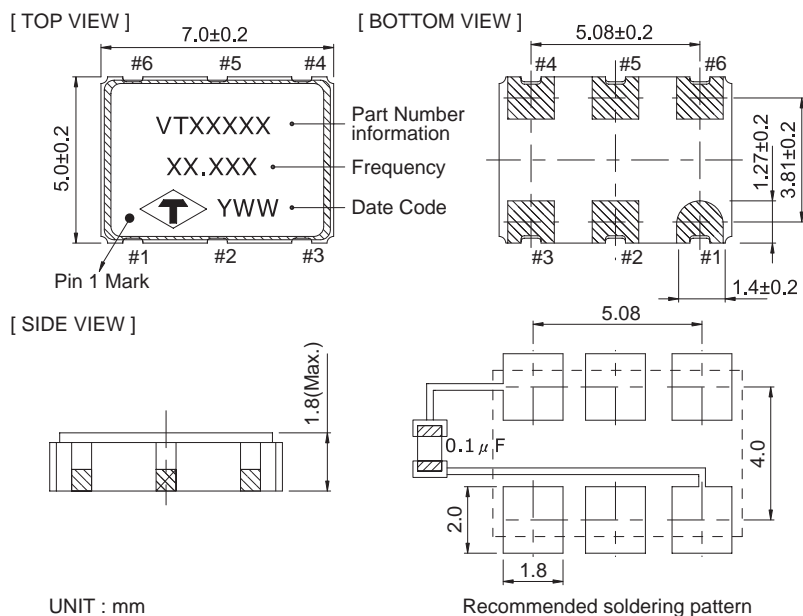
VCXO T-TYPE; V_{DD}: 3.3V; Multiplier Frequency with Tri-State to Pin2; Freq. Stability: ±50ppm; Pulling Range: ±100ppm; Temp. Range: -20°C to +70 °C; Load: CMOS 15pF, Symmetry: 50±5%. Normal Appearance; RoHS Compliant; Freq. 90.000000 MHz.

FREQ. STABILITY vs. TEMP. RANGE

Temp.(°C)	ppm	M: ±25	P: ±50
I	-10 ~ +60	○	○
C	-20 ~ +70	○	○
L	-40 ~ +85	△	○

○ : Standard △ : Available (case by case)
 × : Not available

OUTLINE DRAWING



Pin	Function
#1	VCON
#2	TRI-STATE
#3	GND
#4	OUTPUT
#5	NC
#6	V _{DD}

VCXO

ELECTRICAL SPECIFICATION

Parameter	Min.	Max.	Unit
	3.3		V
Supply Voltage Variation(V_{DD}) 10%	2.97	3.63	V
Frequency Range	60	200	MHz
Operating Temp. Range	Refer to Ordering Information		°C
Frequency Stability *	Refer to Ordering Information		ppm
Pulling Range	±100	—	ppm
Supply Current			
60MHz $F_o < 160$ MHz	—	40	mA
160MHz $F_o < 200$ MHz	—	50	
Output Level (CMOS)			
Output High (Logic "1")	$V_{DD} - 0.4$	—	V
Output Low (Logic "0")	—	0.4	
Transition Time:Rise/Fall Time*			
60MHz $F_o < 200$ MHz	—	5	nSec
Start Time	—	5	mSec
Tri-State (Input to Pin 2)			
Output Active	2.0	—	V
Output in High Impedance State	—	0.5	
Absolute Clock Period Jitter	—	150	pSec
Modulation Bandwidth	25	—	KHz
Input Impedance	2	—	MΩ
Storage Temp. Range	-55	125	°C

*Inclusive of calibration @ 25°C, operating temperature range, input voltage variation, load variation, aging, shock, and vibration.

*Transition times are measured between 10% and 90% of V_{DD} , with an output load of 15pF.