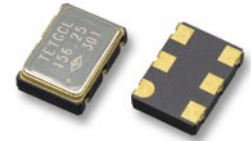


OT Type for PECL/LVDS Crystal Oscillator

RoHS Compliant Standard

FEATURE

1. Typical 7.5 x 5.0 x 1.9 mm 6 Pads Ceramic SMD package.
2. Tight symmetry (45 to 55%) available.
3. Low phase jitter. (Max: 0.5 pSec).
4. Complementary output.
5. Output frequency up to 320MHz.
6. Packing: Tape & Reel, 1000/3000 pcs per Reel.



Actual Size



ORDERING INFORMATION

O	T	E	T	G	C	L	A	N	F	-	?
XO	Package (mm)	Supply Voltage (V)	Tri-State Function	Freq. Stability (ppm)	Temp. Range (°C)	Output Logic and Symmetry	Oscillator Mode	Appearance	Lead Free	Dash	Freq. (MHz)
	7.5 x 5	J : 2.5 E : 3.3	T : Input to Pin2 (std.) R : Input to Pin1 (case by case)	D : ± 25 G : ± 50 H : ± 100	I : -10~+60 C : -20~+70 L : -40~+85	L : PECL / 50±5% V : LVDS / 50±5%	-A: AT Fundamental -T: AT 3 rd Overtone *NOT SELECTABLE BY CUSTOMER	N : Normal	F : RoHS Compliant		XX.XXXXX

Ordering Example: OTETGCLANF-156.250000 MHz

XO T-TYPE; V_{DD}: 3.3V; with Tri-State, input to Pin2; Freq. Stability: ±50ppm; Temp Range: -20°C to +70°C; PECL output, Symmetry: 50±5%; AT Fundamental; Normal Appearance; RoHS Compliant; Freq. 156.250000MHz.

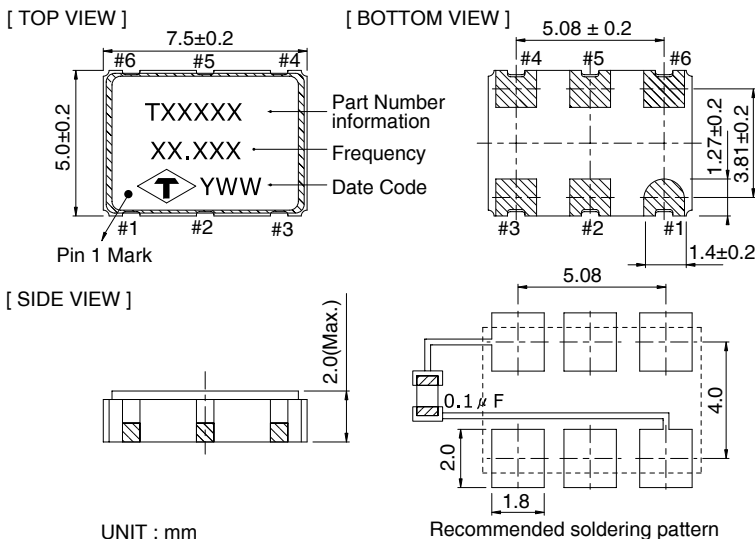
*Not all combinations of options are available.

FREQ. STABILITY vs. TEMP. RANGE

Temp(°C)	ppm	D: ±25	G: ±50
I	-10~+60	△	○
C	-20~+70	△	○
L	-40~+85	×	○

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

OUTLINE DRAWING



Pin	Function
#1	NC / Tri-State
#2	Tri-State / NC
#3	GND
#4	Output
#5	Comp. Output
#6	V _{DD}

ELECTRICAL SPECIFICATION

Output Logic	PECL				LVDS				Unit
	Min.		Max.		Min.		Max.		
Parameter	3.3	2.5	3.3	2.5	3.3	2.5	3.3	2.5	V
Supply Voltage Variation(V _{DD}) 5%	3.135	2.375	3.465	2.625	3.135	2.375	3.465	2.625	V
Frequency Range	19.44		320		19.44		320		MHz
Standard Frequency	25, 38.88, 62.5, 77.76, 100, 106.25, 125, 155.52, 156.25, 159.375, 161.1328, 164.355469, 167.3316, 187.5, 212.5, 250								MHz
Operating Temp. Range	Refer to Ordering Information								°C
Frequency Stability *	Refer to Ordering Information								ppm
Supply Current									
19.44MHz ≤ Fo < 160MHz	-		75		-		50		mA
160MHz ≤ Fo < 250MHz	-		100		-		50		
250MHz ≤ Fo ≤ 320MHz	-		100		-		65		
Output Level									
Output High (Logic "1")	2.275	1.475	-		-		1.6		V
Output Low (Logic "0")	-		1.68	1.095	0.9		-		
Transition Time:Rise/Fall Time +	-		1.0		-		1.0		nSec
Start Time	-		3		-		3		mSec
Tri-State (Input to Pin 2 or Pin 1)									
Output Active	2.5	2	-		2.5	2	-		V
Output in High Impedance State	-		0.5	0.5	-		0.5	0.5	
RMS Phase Jitter (Integrated 12KHz ~ 20MHz)	-		0.5		-		0.5		pS
Storage Temp. Range	-55		125		-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.

* Standard frequencies are frequencies which the crystal has been designed and does not imply a stock position.