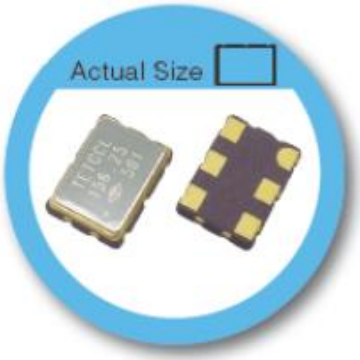
OT Type
7.0 x 5.0 mm SMD PECL/LVDS Crystal Oscillator

FEATURE

Typical 7.0 x 5.0 x 1.5 mm hermetically sealed ceramic package
- Very low jitter performance: typical 0.3 pS RMS from 12k-20MHz
- Fundamental/3rd overtone crystal design
- Output frequency up to 320MHz
- Tri-state enable/disable

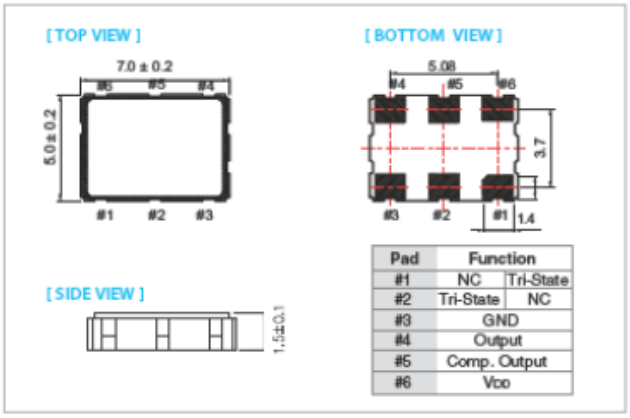


RoHS Compliant Standard

TYPICAL APPLICATION

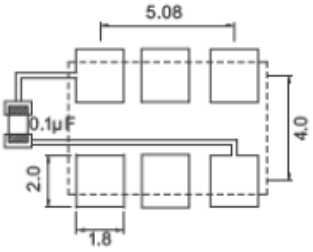
- 10G-Bit Ethernet, Fiber Channel, Storage Area Network, SONET
- Enterprise Servers, Reference clocks for ADC and DAC
- Telecom

DIMENSION(mm)



Pad	Function	
#1	NC	Tri-State
#2	Tri-State	NC
#3	GND	
#4	Output	
#5	Comp. Output	
#6	Vdd	

SOLDER PAD LAYOUT (mm)



ELECTRICAL SPECIFICATION

Parameter	PECL				LVDS				Unit
	3.3V		2.5V		3.3 V		2.5 V		
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	
Supply Voltage Variation (VDD) 5%	3.135	3.465	2.375	2.625	3.135	3.465	2.375	2.625	V
Frequency Range	19.44	320	**19.44**	**320**	19.44	320	19.44	320	MHz
Standard Frequency	77.76, 106.25, 125, 155.52, 156.25, 187.5, 212.5, 312.5								
Supply Current 19.44MHz ≦ F0 < 160MHz	-	75	-	75	-	50	-	50	mA
160MHz ≦ F0 < 250MHz	-	100	-	100	-	50	-	50	
250MHz ≦ F0 < 320MHz	-	100	-	100	-	65	-	65	
Output Level Output High (Logic "1")	2.275	-	1.475	-	-	1.6	-	1.6	V
Output Low (Logic "0")	-	1.68	-	1.095	0.9	-	0.9	-	
Transition Time: Rise/Fall Time+	-	1.0	-	1.0	-	1.0	-	1.0	nSec
Start Time	-	3	-	3	-	3	-	3	mSec
Tri-State(Input to Pin 2 or Pin 1)									
Enable (High voltage or floating)	0.7VDD	-	0.7VDD	-	0.7VDD	-	0.7VDD	-	V
Disable (Low voltage or GND)	-	0.3VDD	-	0.3VDD	-	0.3VDD	-	0.3VDD	
RMS Phase Jitter (integrated 12KHz ~ 20MHz)									
F0 < 80MHz	-	1.4	-	1.4	-	1.4	-	1.4	pSec
80MHz ≦ F0 < 125MHz	-	0.9	-	0.9	-	0.9	-	0.9	
125MHz ≦ F0 < 150MHz	-	0.7	-	0.7	-	0.7	-	0.7	
150MHz ≦ F0 < 200MHz	-	0.5	-	0.5	-	0.5	-	0.5	
200MHz ≦ F0	-	0.3	-	0.3	-	0.3	-	0.3	
Phase Noise 100Hz	-	-70	-	-70	-	-70	-	-70	dBc/Hz
1KHz	-	-100	-	-100	-	-100	-	-100	
10KHz	-	-125	-	-125	-	-125	-	-125	
Aging	-	±3	-	±3	-	±3	-	±3	ppm
Storage Temp. Range	-55	125	-55	125	-55	125	-55	125	℃

Standard frequencies are frequencies which the crystal has been designed and does not imply a stock position
+Transition times are measured between 20% and 80% of VDD
Packing: Tape & Reel, 1000/3000pcs per Reel

FREQ. STABILITY vs. TEMP. RANGE

Temp. (℃) \ ppm	±25	±50
-10~+60	△	0
-20~+70	△	0
-40~+85	X	0

* O: Standard △:Available (case by case) X: Not available
*Inclusive of calibration @ 25℃, operating temperature range, input voltage variation, load variation, aging (1st year), shock, and vibration