

TU7 Series

7.0*5.0 mm SMD Ultra Low Phase Jitter PECL Crystal Oscillator

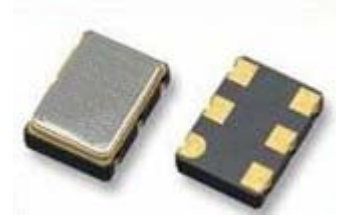


FEATURE

- Typical 7.0 x 5.0 x 1.5 mm 6 pads ceramic SMD package
- Ultra low jitter performance: < 100 fs RMS from 12k-20MHz
- Tight symmetry (45 to 55%) available
- Complementary output

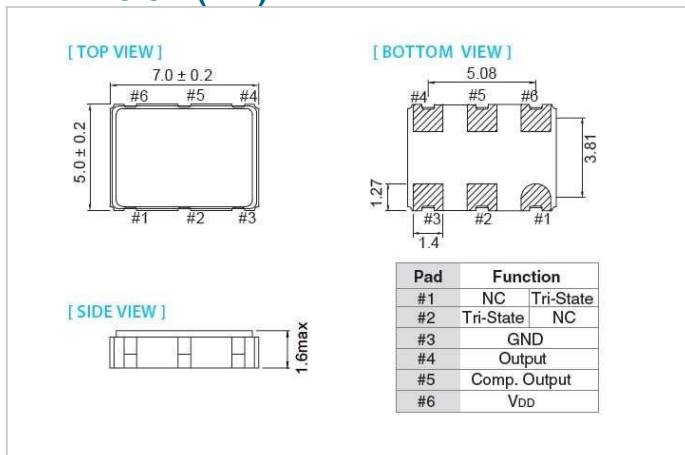
TYPICAL APPLICATION

- 40G-Bit/100G-Bit Ethernet, MAN, SONET
- WLAN/WiMax, xDSL
- Fiber Channel
- Test Instrumentation

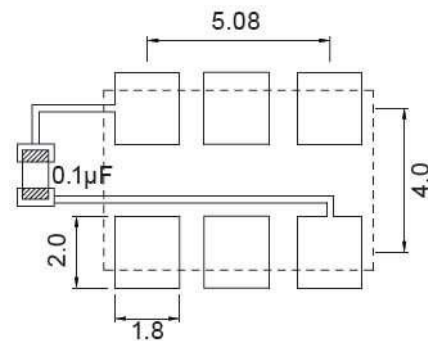


RoHS Compliant Standard

DIMENSION (mm)



SOLDER PAD LAYOUT (mm)



ELECTRICAL SPECIFICATION

Parameter	PECL				Unit
	3.3V		2.5V		
	Min.	Max.	Min.	Max.	
Supply Voltage Variation (VDD) 5%	3.135	3.465	2.375	2.625	V
Frequency Range	70	170	100	160	MHz
Standard Frequency	100,125,155.52,156.25		100,125,155.52,156.25		
Supply Current	70MHz ≤ F0 ≤ 170MHz		-	75	mA
Output Level	Output High (Logic "1")		2.275	-	
	Output Low (Logic "0")		-	1.095	
Transition Time: Rise/Fall Time+ Start Time	-	1.0	-	1.0	nSec
Tri-State (Input to Pin 2 or Pin 1)	-	3	-	3	mSec
Enable	0.7VDD	-	0.7VDD	-	V
Disable	-	0.3VDD	-	0.3VDD	
RMS Phase Jitter (integrated 12KHz ~ 20MHz)	70MHz ≤ F0 ≤ 170MHz		-	0.1	pSec
Aging	-	±3	-	±3	
Storage Temp. Range	-55	125	-55	125	°C

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. (°C)	ppm	ppm	
		±25	±50
-10~+60		△	○
-20~+70		△	○
-40~+85		X	○

* O: Standard △: Available (case by case) X: Not available

* Inclusive of calibration @ 25°C, operating temperature range, input voltage variation, load variation, aging (1st year), shock, and vibration