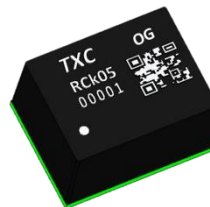


## Product Features

1. Output Frequency : 10 ~ 54MHz
2. Supply Voltage : 3.3V (Typ.)
3. Excellent Stability Over Temperature:  
±5 ~ ±10ppb (±3ppb available upon request)
4. Operating Temperature : -40 ~ 85 °C (95°C available upon request)
5. CMOS Output Waveform
6. Voltage Control Function Available
7. RoHS and REACH Compliant , Pb-free, Halogen-free
8. Industry Standard Package :  
9.8 x 7.6 x 5.7 mm (3.9 mm height available upon request)

Application :

- Stratum 3E synchronization
- Base stations, DU, CU
- AAU / 5G RRH / 5G Small Cell
- Phase Holdover



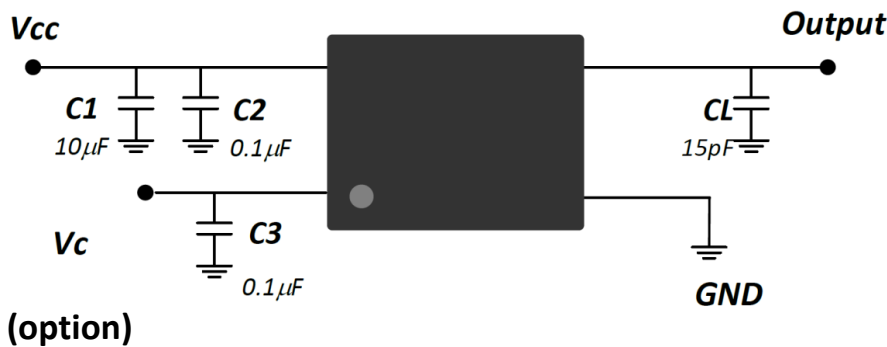
● Table 1 . Electrical Specifications (Note1)

Parameters	Symbol	Min.	Typ.	Max.	Units	Notes
<b>Operating Conditions</b>						
Operating Temperature	Topr	-40 ~ 85			°C	95°C available upon request
Supply Voltage	Vcc	+3.315	+3.3	+3.465	V	±5%
Current Consumption	Icc	-	-	750	mA	During warm up
		-	-	200	mA	Steady state at 25°C
Warm-up Time	-	-	-	3	min	
<b>Frequency Stability</b>						
Nominal Frequency	F	10 ~ 54			MHz	
Frequency Tolerance	-	±200	-	±500	ppb	
Reflow Shift	-	-	-	±500	ppb	After 1 hour recovery at 25°C
Frequency Stability	vs. Temp	±5	-	±10	ppb	±3ppb available upon request
	vs. Load	-	±10	-		vs. Load (±5%)
	vs. Vcc	-	±10	-		vs. Supply Voltage (±5%)
Aging	Aging	-	-	±1	ppb	Per day
		-	-	±0.3	ppm	1st. Year
		-	-	±1.5		10 Years
All Causes Stability	-	-	-	±4.6	ppm	Under all operating conditions for 10 years
<b>AFC (optional)</b>						
Voltage Range	-	0	1.65	3.3	V	Vc, control voltage range
Pulling Range	-	±3.6	-	±5	ppm	For 10 years operating life
Linearity	-	-	1	3	%	

Note 1. The frequency specifications apply after 48 hrs of continuous operation after soldering and assembly based on nominal conditions.

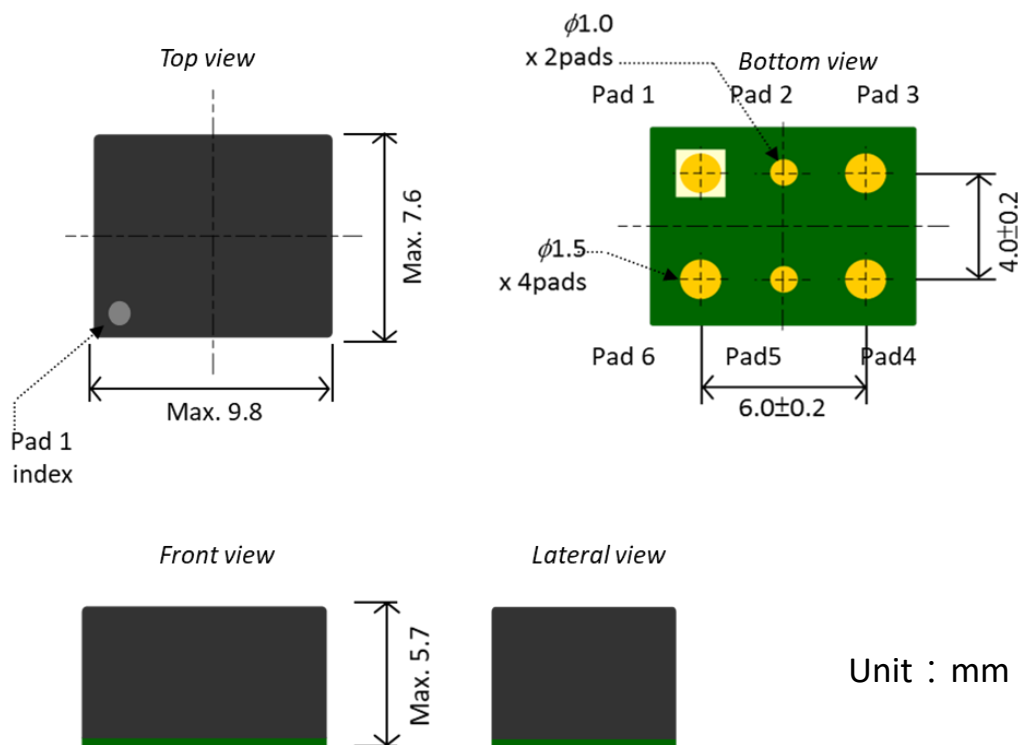
Parameters	Symbol	Min.	Typ.	Max.	Units	Notes
<b>Output Parameters</b>						
Output Waveform		LVCMOS			-	
High Level	VOH	-	-	+2.7	V	
Low Level	VOL	-0.3	-	-		
Duty Cycle	-	45	50	55	%	
Rise/Fall Times	-	-	-	4	ns	10% to 90% @ 15pf load
<b>Phase Noise</b>						
Phase Noise (10MHz)	1Hz	-	-80	-	dBc/Hz	
	10Hz	-	-110	-		
	100Hz	-	-135	-		
	1kHz	-	-149	-		
	10kHz	-	-159	-		
	100kHz	-	-160	-		
	1MHz	-	-161	-		

● **Test Circuit**



Name	Function
C1	AC Noise Bypass for Vcc
C2	AC Noise Bypass for Vcc
C3	AC Noise Bypass for Vc
CL	Load Capacitance

● **Dimensions & Footprint**



Pin No.	Function
1	Vc
2	DNC
3	GND
4	Output
5	DNC
6	Vcc