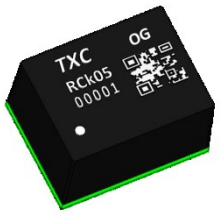
Product Features

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



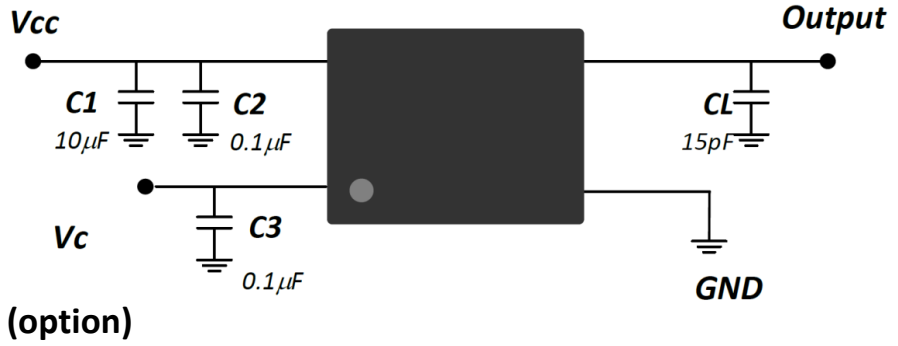
- **Table 1 . Electrical Specifications (Note1)**

Parameters	Symbol	Min.	Typ.	Max.	Units	Notes
Operating Conditions						
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	
Frequency Stability						
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
AFC (optional)						
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
Output Parameters						
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
Phase Noise						
Phase Noise (10MHz)	1Hz	-	-86	-	dBc/Hz	
	10Hz	-	-119	-		
	100Hz	-	-140	-		
	1kHz	-	-157	-		
	10kHz	-	-162	-		
	100kHz	-	-163	-		
	1MHz	-	-164	-		

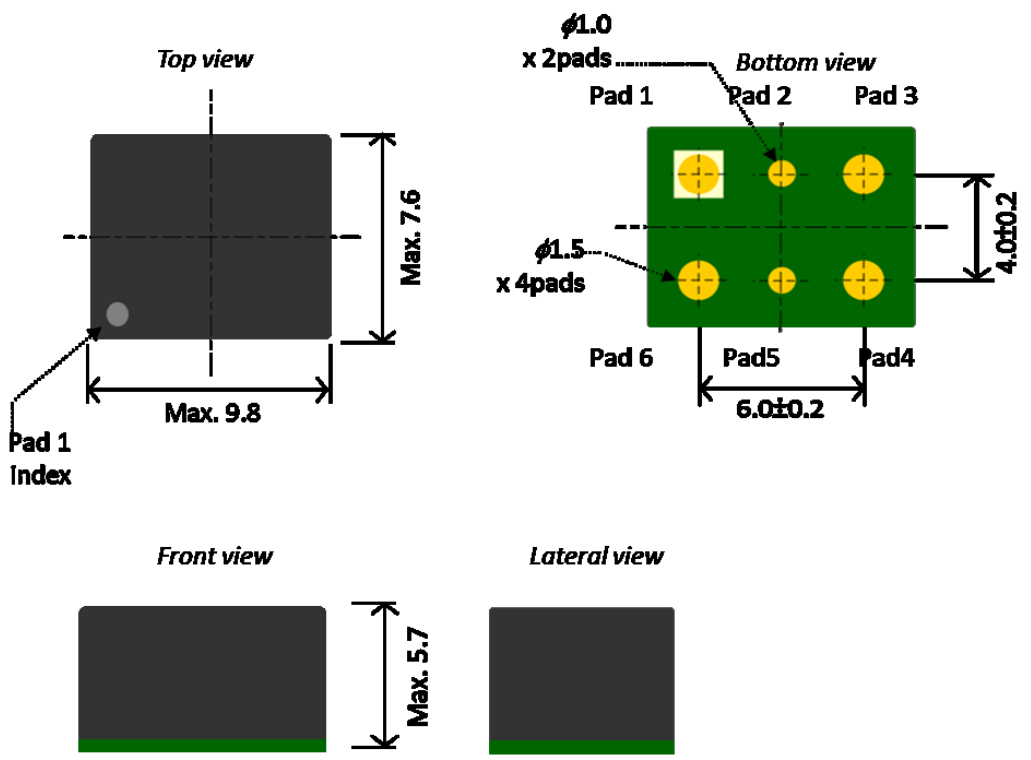
- **Test Circuit**



(option)

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