TCXO HIGH STABILITY
105 ºC HIGH TEMPERATURE

Product Number
TG-5510CA: X1G006001xxxx99
TG-5511CA: X1G006011xxxx99

TG-5510CA
TG-5511CA

- Frequency range : 10 MHz to 54 MHz
- Supply voltage : 3.3 V Typ.
- Frequency / temperature characteristics : ±0.28 × 10^{-6} Max. (-40 ºC to +85 ºC, 105 °C option)
- Free-run accuracy : ±4.6× 10^{-6} Max. / 20 years (for Stratum3)
- External dimensions : 7.0 × 5.0 × 1.5 mm (10 pins or 4 pins)
- Applications : Network synchronization, Stratum3, BTS, SyncE, IEEE1588, Microwave, BTS
- Features : 105 °C High temp, High stability

TG-5510CA
(10 pins)

TG-5511CA
(4 pins)

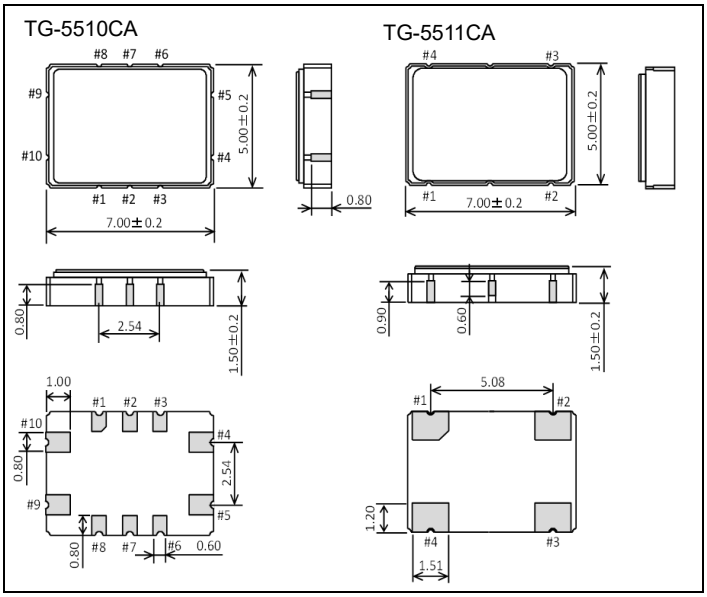
Specifications (characteristics)

Item	Symbol	CMOS	Clipped sine wave	Condition
Output frequency range	f_o	10 MHz to 54 MHz		Please contact us about available frequencies.
Supply voltage	V_{CC}	3.3 V ±5 %		
Storage temperature	T_stg	-40 °C to +105 °C		Storage as single product.
Operating temperature	T_use	-40 °C to +85 °C (-40 °C to +105 °C)		Standard (Option)
a) Frequency tolerance	f_tol	±1.0 × 10^{-6} Max.		After reflow, +25 °C
b) Frequency/temperature characteristics	f_o-T_C	±0.28 × 10^{-6} Max. (±0.25 × 10^{-6} Max.)		Standard (Option)
c) Frequency/load coefficient	f_o-Load	±0.1 × 10^{-6} Max.		Load ±10 %
d) Frequency/voltage coefficient	f_o-V_{CC}	±0.1 × 10^{-6} Max.		V_{CC} ± 5 %
e) Frequency aging	f_age	±0.5 × 10^{-6} Max.		+25 °C, First year
		±3.0 ×10^{-6} Max.		+25 °C, 20 years
Holdover stability (Constant temperature)	-	±0.01 × 10^{-6} Max. (+25 °C, 24 hours)		After 10 days of continuous operation
		±0.04 × 10^{-6} Max. (+25 °C, 24 hours)		After 48 hours of continuous operation
Wander generation (MTIE, TDEV)		Compliant with GR-1244CORE, ITU-T G.8262		
Free-run accuracy	-	±4.6 × 10^{-6} Max. / 20 years		This includes Item a), b), c), d) and e)
Current consumption	I_{CC}	7.0 mA Max.	6.0 mA Max.	10 MHz≦f_0≦26 MHz
		9.0 mA Max.		26 MHz＜f_0≦40 MHz
		10.0 mA Max.		40 MHz＜f_0≦54 MHz
Symmetry	SYM	45 % to 55 %	-	GND level (DC cut)
Output voltage	V_{OH}	90 % Vcc Min.	-	
	V_{OL}	10 % Vcc Max.	-	
Rise time / Fall time	tr/tf	8.0 ns Max.	-	10 % V_{CC} to 90 % V_{CC} level, Load:15 pF
Start-up time	t_str	5 ms. Max.		t=0 at 90 % V_{CC}
Output level	V_{PP}	-	0.8 V Min.	Peak to Peak
Output load condition	Load	15 pF	10 kΩ//10 pF	
Input voltage	V_{IH}	70% V_{CC} Min.		OE terminal (Enable voltage)
	V_{IL}	30% V_{CC} Max.		OE terminal (Disable voltage)

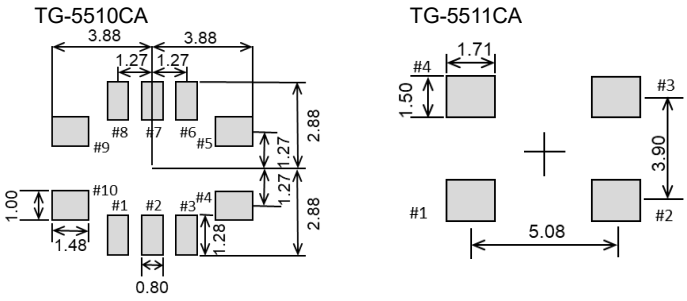
* Note : Please contact us for requirements not listed in this specification.

Product Name (Standard form): TG-5510CA-*** 30.720000MHz
①Model ②Package type ③Spec segment(Please contact us) ④Frequency

External dimensions (Unit :mm)



Footprint (Recommended) / Pin Map (Unit :mm)



To maintain stable operation, provide a 0.01 µF to 0.1 µF by-pass capacitor at a location as near as possible to the power source terminal of the crystal product (between V_{CC} - GND).

Pin	Connection
1, 2, 3, 6, 7, 10	N.C.
4	GND
5	OUT
8	OE
9	V_{CC}

OE pin = "H" or "open": Specified frequency output.
OE pin = "L" : Output is high impedance.

Pin	Connection
1	N.C
2	GND
3	OUT
4	V_{CC}