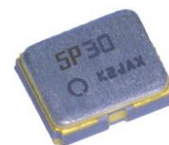


**VC-TCXO / TCXO / TCXO-Standby
For Automotive
85 °C High temperature range**



Product Number (Please contact us)
TG2016SLA : X1G005741xxxx16

TG2016SLA



TG2016SLA

(2.0 × 1.6 × 0.7 mm)

- Output frequency : 13 MHz to 55 MHz
- Supply voltage : 1.8 V Typ. / 3.3 V Typ.
- Frequency / temperature characteristics : ±0.5 × 10⁻⁶ Max. (-40 °C to +85 °C)
- External dimensions: 2.0 × 1.6 × 0.7 mm Max.
- Applications : GNSS for Automotive, V2X (TCU, DSRC)*
- Features : Low noise, Stand-by function (ST)
- Conforms to AEC-Q100

* GNSS: Global Navigation Satellite System V2X: Vehicle to Everything TCU: Telematics control unit DSRC: Dedicated Short Range Communication

Specifications (characteristics)

Item	Symbol	VC-TCXO	TCXO	TCXO-Standby	Conditions / Remarks
Output frequency range	f _o	13 MHz to 55 MHz			
		26 MHz, 49.58 MHz			Standard frequency
Supply voltage	V _{CC}	1.8 V ±0.1 V / 3.3 V ±5 %			Supply voltage range :1.7 V to 3.63 V
Storage temperature range	T _{stg}	-55 °C to +125 °C			Storage as single product.
Operating temperature range	T _{use}	G: -40 °C to +85 °C			Standard
Frequency tolerance	f _{tol}	±2.0 × 10 ⁻⁶ Max.			After 3 times reflow, +25 °C
Frequency/temperature characteristics	f _o -T _C	C: ±0.5 × 10 ⁻⁶ Max.			Standard stability version
Frequency/load coefficient	f _o -Load	±0.2 × 10 ⁻⁶ Max.			10 kΩ // 10 pF ±10 %
Frequency/voltage coefficient	f _o -V _{CC}	±0.2 × 10 ⁻⁶ Max.			V _{CC} ± 5 %
Frequency aging	f _{age}	±1.0 × 10 ⁻⁶ Max.			+25 °C, First year, 13 MHz ≤ f _o ≤ 20 MHz, 26 MHz ≤ f _o ≤ 40 MHz
		±1.5 × 10 ⁻⁶ Max.			+25 °C, First year, 20 MHz < f _o < 26 MHz 40 MHz < f _o ≤ 55 MHz
Current consumption	I _{CC}	2.0 mA Max. 2.5 mA Max.			13 MHz ≤ f _o ≤ 40 MHz 40 MHz < f _o ≤ 55 MHz
Input resistance	Z _{in}	500 kΩ Min.		-	V _C - GND (DC)
Frequency control range	f _{cont}	±8.0 × 10 ⁻⁶ to ±15.0 × 10 ⁻⁶		-	B: V _C = 0.9 V ±0.6 V (V _{CC} = 1.8 V) or E: V _C = 1.65 V ±1.0 V (V _{CC} = 3.3 V)
Frequency change polarity	f _{cp}	Positive polarity		-	
Stand-by current	I _{std}	-		10 μA Max.	ST = GND
Input voltage	V _{IH}	-		80 % V _{CC} Min.	ST terminal
	V _{IL}	-		20 % V _{CC} Max.	
Symmetry	SYM	40 % to 60 %			GND level (DC cut)
Output voltage	V _{pp}	0.8 V Min.			Peak to Peak
Start-up time	t _{str}	2.0 ms Max.			T = 0 at 90 % V _{CC}
Output load	Load _R	10 kΩ			DC cut capacitor = 0.01 μF
	Load _C	10 pF			
G-sensitivity	G _s	1.5 × 10 ⁻⁹ /G Max.			30 Hz to 3 kHz, sinewave, 3axes

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

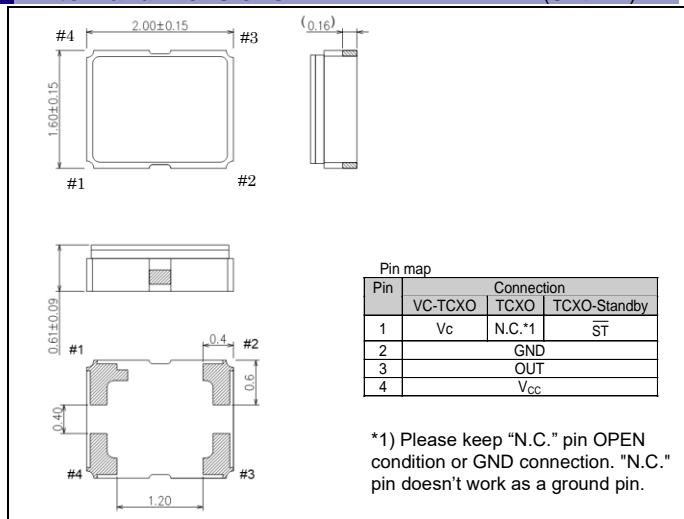
Product Name **TG2016 SLA 26.000000MHz** E C G N N M
(Standard form) ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨

- ① Model(TG2016) ② Output (S: Clipped sine wave)
- ③ Frequency ④ Supply voltage (Refer to symbol table)
- ⑤ Frequency / temperature characteristics (C: ±0.5 × 10⁻⁶ Max.)
- ⑥ Operating temperature (G: -40 °C to +85 °C) ⑦ ST function (N: Non, S: Standby)
- ⑧ Vc function(Refer to symbol table) ⑨ Internal identification code

④ Supply voltage[V _{CC}], ⑧ Vc function[V _C] (Symbol table)			
Voltage [V]	TCXO	VC-TCXO	
④ V _{CC} (Typ.)	E: 1.8 C: 3.3	E: 1.8	C: 3.3
⑧ V _C (Typ.)	N: Non	B: 0.9	E: 1.65

External dimensions

(Unit:mm)



Footprint (Recommended)

(Unit:mm)

