

TCXO/VC-TCXO  
For Automotive, HIGH STABILITY



Product Number  
TG-5035CJ :X1G003841Axxx00  
TG-5035CG :X1G003851Axxx00

TG-5035CJ  
TG-5035CG



TG-5035CJ (2.0 x 1.6 x 0.73 mm) TG-5035CG (2.5 x 2.0 x 0.8 mm)

- Frequency range : 25 MHz ~ 52 MHz (TG-5035CJ)
- Supply voltage : 1.8 V Typ./ 2.8 V Typ./ 3.0 V Typ./ 3.3 V Typ.
- Frequency / temperature characteristics :  $\pm 0.5 \times 10^{-6}$  Max or  $\pm 2.0 \times 10^{-6}$  Max.
- Applications : Car navigation system, GPS
- Features : High stability, Stand-by function ( $\overline{ST}$ )
- Conforms to AEC-Q200

Specifications (characteristics)

Item	Symbol	VC-TCXO	TCXO	TCXO-Standby	Conditions / Remarks
Output frequency range	$f_o$	26 MHz, and 38.4 MHz			Standard frequency
		25.000 MHz ~ 52.000 MHz			
Supply voltage	$V_{cc}$	1.8 V $\pm 0.1$ V / 2.8 V $\pm 5\%$ / 3.0 V $\pm 5\%$ / 3.3 V $\pm 5\%$			Supply voltage Range : 1.7 V to 3.6 V
Storage temperature	$T_{stg}$	-40 C to +90 C			Storage as single product.
Operating temperature	$T_{use}$	-40 C to +85 C			
Frequency tolerance	$f_{tol}$	$\pm 1.5 \times 10^{-6}$ Max.			After reflow, +25 C
Frequency/temperature characteristics	$f_o-T_c$	$\pm 0.5 \times 10^{-6}$ Max. / -40 C to +85 C			High stability version (for GPS)
		$\pm 2.0 \times 10^{-6}$ Max. / -40 C to +85 C			Standard stability version
Frequency/load coefficient	$f_o-Load$	$\pm 0.2 \times 10^{-6}$ Max.			10 k $\Omega$ // 10 pF $\pm 10\%$
Frequency/voltage coefficient	$f_o-V_{cc}$	$\pm 0.2 \times 10^{-6}$ Max.			$V_{cc} \pm 5\%$
Frequency aging	$f_{age}$	$\pm 1.0 \times 10^{-6}$ Max.			+25 C, First year, $f_o \leq 40$ MHz
		$\pm 1.5 \times 10^{-6}$ Max.			+25 C, First year, 40 MHz < $f_o \leq 52$ MHz
Current consumption	$I_{cc}$	1.5 mA Max.			$f_o \leq 26$ MHz
		2.0 mA Max.			26 MHz < $f_o \leq 52$ MHz
Stand-by current	$I_{std}$	—		10 $\mu$ A Max.	$\overline{ST} = GND$
Input voltage	$V_{IH}$	—		80% $V_{cc}$ Min.	$\overline{ST}$ terminal
	$V_{IL}$	—		20% $V_{cc}$ Max.	
Input resistance	$R_{in}$	500 k $\Omega$ Min.		—	$V_C - GND$ (DC)
Frequency control range	$f_{cont}$	$\pm 8.0 \times 10^{-6}$ to $\pm 15.0 \times 10^{-6}$		—	$V_C = 0.9 V \pm 0.6 V$ ( $V_{cc} = 1.8 V$ ) or $V_C = 1.4 V \pm 1.0 V$ ( $V_{cc} = 2.8 V$ ) or $V_C = 1.5 V \pm 1.0 V$ ( $V_{cc} = 3.0 V$ ) or $V_C = 1.65 V \pm 1.0 V$ ( $V_{cc} = 3.3 V$ )
Frequency change polarity	—	Positive polarity		—	
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 condition	Load_R	10 k $\Omega$			DC cut capacitor = 0.01 $\mu$ F
	Load_C	10 pF			

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

Product Name TG-5035 CJ-\*\*\* 26.000000MHz  
(Standard form) ① ② ③ ④  
①Model ②Package type ③Spec segment (Please contact us) ④Frequency

External dimensions

(Unit:mm)

Footprint (Recommended)

(Unit:mm)

