









Product Number (Please contact us) TG-5035CJ :X1G003841Axxx00 TG-5035CG:X1G003851Axxx00

## TG - 5035CJ/CG

: 13 MHz to 52 MHz •Frequency range : 1.8 V Typ. Supply voltage •Frequency / temperature characteristics : ±0.5× 10<sup>-6</sup> Max.

Car navigation system, GPS Applications

•Features : High stability, Low supply voltage (1.8 V)

•Conforms to AEC-Q200



TG-5035CJ  $(2.0 \times 1.6 \times 0.73 \text{ mm})$   $(2.5 \times 2.0 \times 0.8 \text{ mm})$ 

N



TG-5035CG

Actual size

TG-5035CJ TG-5035CG

### Specifications (characteristics)

	Symbol	Specifications		
Item		VC-TCXO	TCXO	Conditions / Remarks
	fo	13 MHz, 16.368 MHz, 16.369 MHz, 19.2 MHz,		Standard frequency
Output frequency range		26 MHz, and 38.4 MHz		
		13.000 MHz to 52.000 MHz		
Supply voltage	Vcc	1.8 V ±0.1 V (Range :1.7 V to 3.3 V)		
Storage temperature	T_stg	-40 °C to +85 °C		Storage as single product.
Operating temperature	T_use	-40 °C to +85 °C		
Frequency tolerance	f_tol	±1.5 ×10 <sup>-6</sup> Max.		After reflow, +25 °C
Frequency/temperature characteristics	fo-Tc	$\pm 0.5 \times 10^{-6}$ Max. / -40 °C to +85 °C		
Frequency/load coefficient	fo-Load	±0.2 × 10 <sup>-6</sup> Max.		10 k $\Omega$ // 10 pF ±10 %
Frequency/voltage coefficient	fo-Vcc	±0.2 ×10 <sup>-6</sup> Max.		Vcc =1.8 V ±0.1 V
Frequency aging	f age	±1.0 ×10 <sup>-6</sup> Max.		+25 °C , First year,13 MHz≦fo≦40 MHz
	_age	±1.5 ×10 <sup>-6</sup> Max.		+25 °C , First year,40 MHz <fo≦52 mhz<="" td=""></fo≦52>
Current consumption	Icc	2.0 mA Max.		
Input resistance	Rin	500 kΩ Min.	<del>-</del>	Vc- GND (DC)
Frequency control range	f_cont	$\pm 5.0 \times 10^{-6} \text{ to } \pm 12.0 \times 10^{-6}$		Vc=0.9 V ±0.6 V (Vcc =1.8 V)
Frequency change polarity	_	Positive polarity	_	
Symmetry	SYM	40 % to 60 %		GND level (DC cut)
Output voltage	VPP	0.8 V Min.		Peak to Peak
Output load condition	Load_R	10 kΩ		-DC cut capacitor = 0.01 μF
Output load condition	Load_C	10 pF		DO cut capacitor – 0.01 pr

<sup>\*</sup> Note: Please contact us for requirements not listed in this specification.

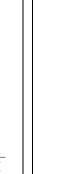
TG-5035CJ C0.15

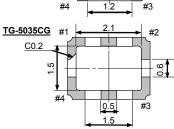
1.18

### External dimensions

(Unit:mm)

0.48



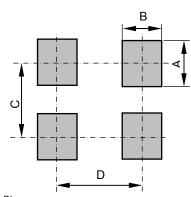


<Bottom View>

Pin map					
Pin	Connection				
	VC-TCXO	TCXO			
1	VC	N.C.			
2	GND				
3	OUT				
4	VCC				

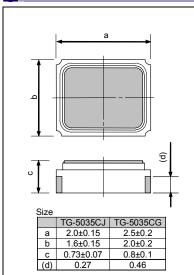
### Footprint (Recommended)

(Unit:mm)



Size		
	TG-5035CJ	TG-5035CG
	(2.0x1.6mm)	(2.5x2.0mm)
Α	0.75	1.0
В	0.6	0.8
С	1.13	1.4
D	1.65	2.1

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



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All of our major manufacturing and non-manufacturing sites, in Japan and overseas, completed the acquisition of ISO 14001 certification.

ISO 14000 is an international standard for environmental management that was established by the International Standards Organization in 1996 against the background of growing concern regarding global warming, destruction of the ozone layer, and global deforestation.

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ISO/TS16949 is the international standard that added the sector-specific supplemental requirements for automotive industry based on ISO9001.

Explanation of the mark that are using it for the catalog



►Pb free.



- ► Complies with EU RoHS directive.
  - \*About the products without the Pb-free mark.

    Contains Pb in products exempted by EU RoHS directive.

    (Contains Pb in sealing glass, high melting temperature type solder or other.)



▶ Designed for automotive applications such as Car Multimedia, Body Electronics, Remote Keyless Entry etc.



▶ Designed for automotive applications related to driving safety (Engine Control Unit, Air Bag, ESC etc ).

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- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



#### Как с нами связаться

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