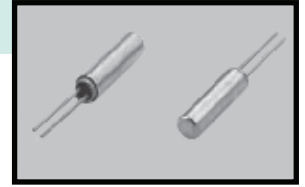


Quartz Crystal Resonator (32.768KHz)



TC12 , TC14 , TC26 , TC38

General Description

The TC12/14/26/38 are low frequency through-hole technology Watch Quartz Crystal Units, which incorporate a tuning fork Quartz Crystal Resonator. They operate under vacuum in a hermetically sealed tubular metal can package

Features

High stability and low aging guaranteed by hermetic sealing. Available for extended operating temperature range. Small size, low profile, lightweight. 100% Pb-free, RoHS-compliant. Very price competitive product

Main Applications

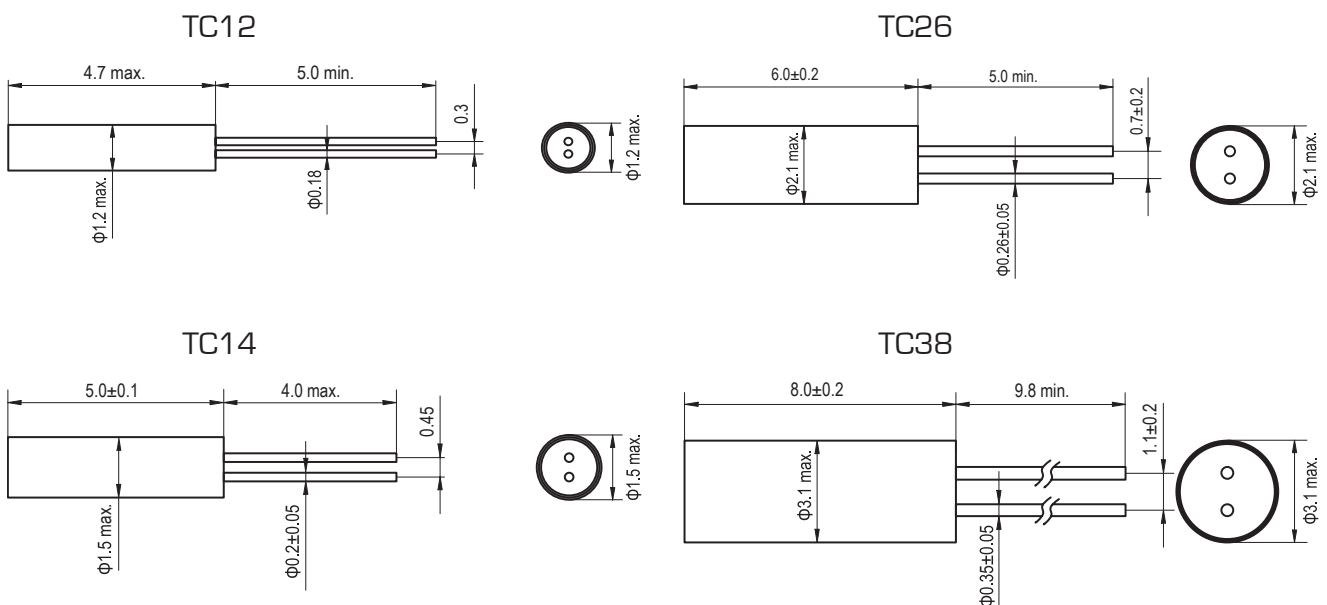
Mobile phone, Notebook

Electrical characteristics

Item	Symbol	Values			
		TC12	TC14	TC26	TC38
Part number		TC12	TC14	TC26	TC38
Nominal frequency	F	32.768 KHz			
Frequency tolerance (@ +25°C)	$\Delta f/F$	5[*]/10/15/ 20 ppm			
Frequency stability	$\Delta f/F$	0.0034pF (typical)			
Operating temp. range	To	-10°C / +60°C		-20°C / +70°C	
Storage temp. range	Ts	-40°C / +85°C			
Load capacitance	Cl	8pF		12.5pF	
Equivalent serie resistance	ESR	50 K Ω	40 K Ω	35 K Ω	35 K Ω
Shunt capacitance	CO	0.8pF	1.0pF	1.3pF	1.6pF
Motional capacitance	C1	0.002pF	0.0025pF	0.003pF	0.0035pF
Drive level	P	1 μ W			
Turnover temperature	Tt	+25°C \pm 5°C			
Quality factor (typical)	Q	60000	85000	70000	85000
Aging	$\Delta f/F$	\pm 3ppm max @ +25°C			

[*] only TC26 and TC38

Dimensions



Remark : specifications subject to change without prior notice. Please confirm with our sales

TC12 , TC14 , TC26 , TC38

Part Number Generator

TC12 - 0.032768 P12.5 C N TR xxx
 0 1 2 3 4 5 6

0 : Type
TC12 TC14 TC26 TC38

1 : Frequency (MHz)
□□□.□□□□□□□□ max 10 digits including comma

2 : Load capacitance
P8 = 8pF P12.5 = 12.5pF

3 : Tolerance
C= ≤±20ppm D= ≤±15ppm E= ≤±10ppm G= ≤±5ppm

4 : Op. Temp. range
N=-40/+85

5 : Packing
TR = Tape & Reel (3K pcs)

6 : Customized code
Note : factory use

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