



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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actual size

Quartz Crystal · JTX210

SMD Tuning Fork Crystal · 2.0 x 1.2 mm

- 32.768 kHz
- reflow soldering temperature: 260 °C max.
- package height 0.6 mm max.



General Data

type	JTX210
frequency	32.768 kHz
frequency tolerance at 25 °C ± 5 °C	± 20 ppm / ± 30 ppm
load capacitance C_L	12.5 pF std. / 9.0 pF / 7.0 pF
temperature constant (T_C)	$T_C = -0.04 \text{ ppm} / ^\circ\text{C}^2 \text{ max.}$ $T_C = -0.034 \text{ ppm} / ^\circ\text{C}^2 \text{ typical}$
frequency temperature characteristic	$\Delta f = T_C \cdot (T_A - T_{TP})^2 \text{ in [ppm]}$ $T_A = \text{actual ambient temperature}$ $T_{TP} = 25 \text{ }^\circ\text{C} \pm 5 \text{ }^\circ\text{C}$ $T_{TP} = \text{turning point temperature}$
operating temperature range	refer to frequency stability table
shunt capacitance C_0	1.15 pF typical
series resistance max. (ESR)	80 k Ω (90 k Ω for T2 & T3)
storage temperature	-40 °C ~ +125 °C
drive level max.	0.5 μW
aging first year	< ± 3 ppm

Frequency Stability vs. Temperature

		-80 ppm	-160 ppm	-250 ppm	-400 ppm
-20 °C ~ +70 °C	STD.	●			
-40 °C ~ +85 °C	T1		●		
-40 °C ~ +105 °C	T2			○	
-40 °C ~ +125 °C	T3				○

● standard ○ available

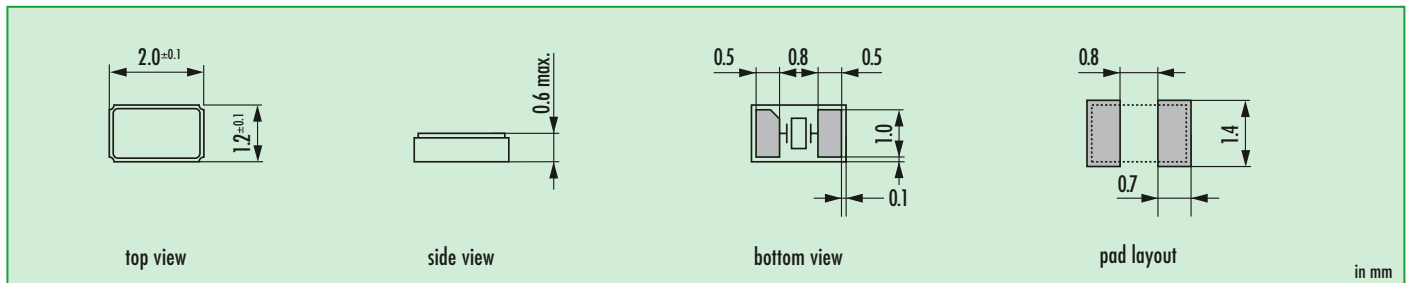
Marking

Factory code / CL code / date code / internal code

CL code: A = 12.5 pF, B = 9 pF, C = 7 pF

		Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.
2015	2019	a	b	c	d	e	f	g	h	i	k	l	m
2016	2020	n	p	q	r	s	t	u	v	w	x	y	z
2017	2021	A	B	C	D	E	F	G	H	J	K	L	M
2018	2022	N	P	Q	R	S	T	U	V	W	X	Y	Z

Dimensions



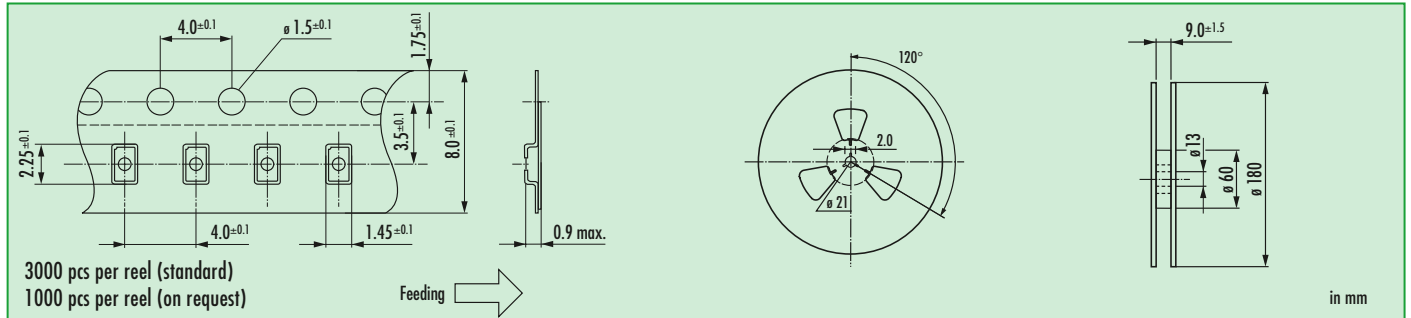
Order Information

Q	frequency	type	load capacitance	tolerance at 25 °C	option
Quartz	0.032768 MHz	JTX210	12.5 pF standard 9 pF 7 pF	20 = ± 20 ppm 30 = ± 30 ppm	blank = -20 °C ~ +70 °C T1 = -40 °C ~ +85 °C T2 = -40 °C ~ +105 °C T3 = -40 °C ~ +125 °C

Example: Q 0.032768-JTX210-12.5-20-T1-LF (Suffix LF = RoHS compliant / Pb free pads)

Quartz Crystal · JTX210

Taping Specification



Reflow Soldering Profile

