



actual size

Quartz Crystal · JTX110

SMD Tuning Fork Crystal · 1.6 x 1.0 mm

- 32.768 kHz
- reflow soldering temperature: 260 °C max.
- package height 0.5 mm max.



General Data

type	JTX110
frequency	32.768 kHz
frequency tolerance at 25 °C ± 5 °C	± 20 ppm
load capacitance C_L	12.5 pF std. / 9.0 pF / 10.0 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	$\Delta f = T_C \cdot (T_A - T_{TP})^2 \text{ in [ppm]}$ $T_A = \text{actual ambient temperature}$ $T_{TP} = 25 ^\circ\text{C} \pm 5 ^\circ\text{C}$ $T_{TP} = \text{turning point temperature}$
operating temperature range	-20 °C ~ +70 °C / -40 °C ~ +85 °C
shunt capacitance C_0	1.3 pF typical
series resistance max. (ESR)	90 kΩ
storage temperature	-40 °C ~ +85 °C
drive level max.	0.5 μW
aging first year	< ± 3 ppm

Frequency Stability vs. Temperature

		- 80 ppm	- 160 ppm	
-20 °C ~ +70 °C	STD.	●		
-40 °C ~ +85 °C	T1		●	
● standard				

D / A / datecode

D = factory code

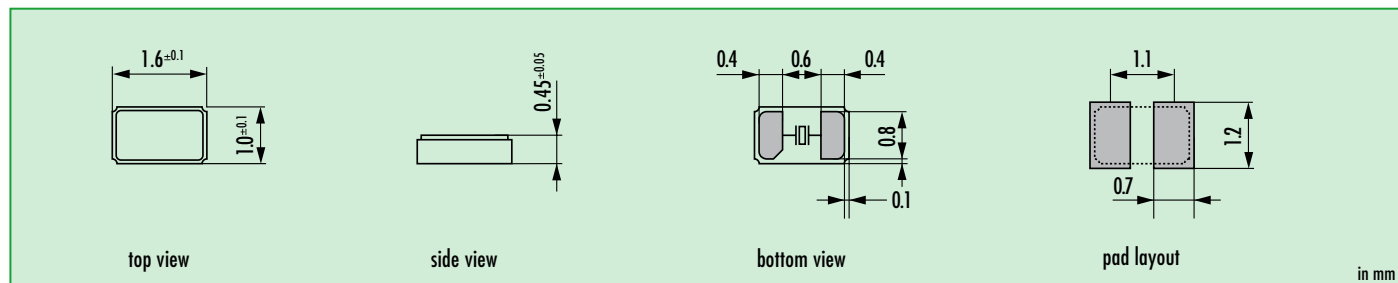
A = frequency code = 32.768 kHz

date code = YWW

Y = year

WW = week

Dimensions



Order Information

Q	frequency	type	load capacitance	stability at 25 °C	option
Quartz	0.032768 MHz	JTX110	12.5 pF standard 9 pF 10 pF	20 = ± 20 ppm	blank = -20 °C ~ +70 °C T1 = -40 °C ~ +85 °C

Example: Q 0.032768-JTX110-12.5-20-T1-LF (Suffix LF = RoHS compliant / Pb free pads)