



actual size

SMD Quartz Crystal · JXS22

4 Pad Version · 2.5 x 2.0 mm

- ± 10 ppm type available
- EMI shielding possible by grounded lid
- reflow soldering temperature: 260 °C max.
- ceramic / metal package



General Data

type	JXS22	
frequency range	12.0 ~ 54.0 MHz	(fund. AT-cut)
frequency tolerance at 25 °C	± 10 ppm / ± 30 ppm	
load capacitance C_L	12 pF standard	(option: 8 pF ~ 30 pF / series)
shunt capacitance C_0	< 5 pF	
storage temperature	-40 °C ~ +90 °C	
drive level max.	100 µW	(10 µW recommended)
aging	< ± 3 ppm first year	(< ± 1 ppm for tol. ± 10 ppm)

ESR (series resistance Rs)

frequency in MHz	vibration mode	ESR max. in Ω	ESR typ. in Ω
12.0 ~ 12.999	fund. - AT	150	120
13.0 ~ 15.999	fund. - AT	150	100
16.0 ~ 17.999	fund. - AT	80	50
18.0 ~ 19.999	fund. - AT	80	40
20.0 ~ 24.999	fund. - AT	60	35
25.0 ~ 29.999	fund. - AT	60	30
30.0 ~ 34.999	fund. - AT	50	25
35.0 ~ 54.000	fund. - AT	40	20

Frequency Stability vs. Temperature

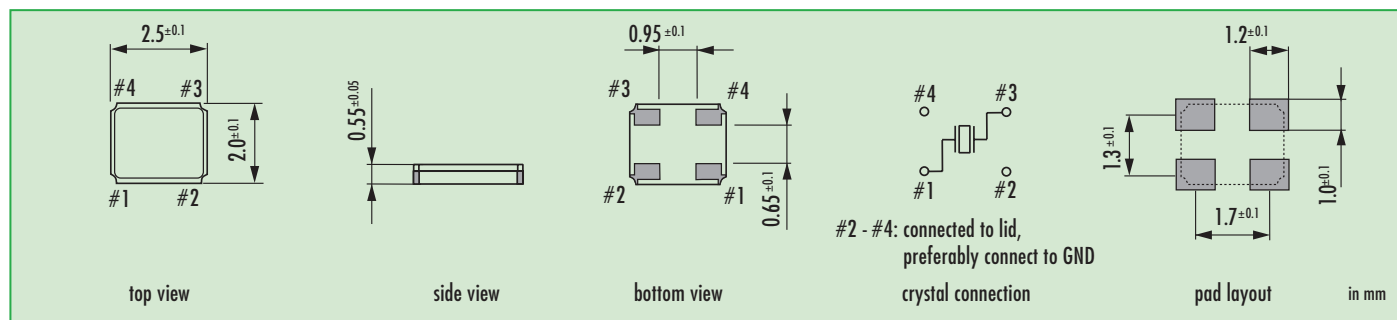
		± 10 ppm	± 15 ppm	± 20 ppm	± 30 ppm	± 50 ppm	± 100 ppm
-20 °C ~ +70 °C	STD.	●	○	○	●	○	D
-40 °C ~ +85 °C	T1		D	○	○	○	○
-40 °C ~ +105 °C	T2					D	○
-40 °C ~ +125 °C	T3					D	○

● standard
 ○ available
 D ask if available

Marking

frequency with load capacitance code					
company code / date code / internal code					
date code:		year/month			
example:		6A = 2016 January			
Jan.	Febr.	Mar.	Apr.	May	June
A	B	C	D	E	F
July	Aug.	Sept.	Oct.	Nov.	Dec.
G	H	J	K	L	M

Dimensions



Order Information

Q	frequency	type	load capacitance	stability at 25 °C	stability vs. temp. range	option
Quartz	12.0 ~ 54.0 MHz	JXS22	12 pF standard 8 pF ~ 30 pF S for series	10 = ± 10 ppm 30 = ± 30 ppm	see table	blank = -20 °C ~ +70 °C T1 = -40 °C ~ +85 °C T2 = -40 °C ~ +105 °C FU = for fundamental frequencies ≥ 20 MHz

Example: Q 32.0-JXS22-12-10/20-T1-FU-LF (Suffix LF = RoHS compliant / Pb free pins or pads)