



actual size

# SMD Quartz Crystal · JXS21

4 Pad Version · 2.0 x 1.6 mm

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



## General Data

type	JXS21
frequency range	16.0 ~ 54.0 MHz (fund. AT-cut)
frequency tolerance at 25 °C	± 10 ppm / ± 20 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 on request)

## ESR (series resistance Rs)

frequency in MHz	vibration mode	ESR max. in $\Omega$	ESR typ. in $\Omega$
16.0 ~ 19.999	fund. - AT	150	120
20.0 ~ 29.999	fund. - AT	100	70
30.0 ~ 35.999	fund. - AT	80	50
36.0 ~ 54.000	fund. - AT	60	40

## Frequency Stability vs. Temperature

		± 15 ppm	± 20 ppm	± 30 ppm	± 50 ppm
-20 °C ~ +70 °C	STD.	○	○	●	○
-40 °C ~ +85 °C	T1	D	○	○	○

● standard  
 ○ available  
 D ask if available

## Marking

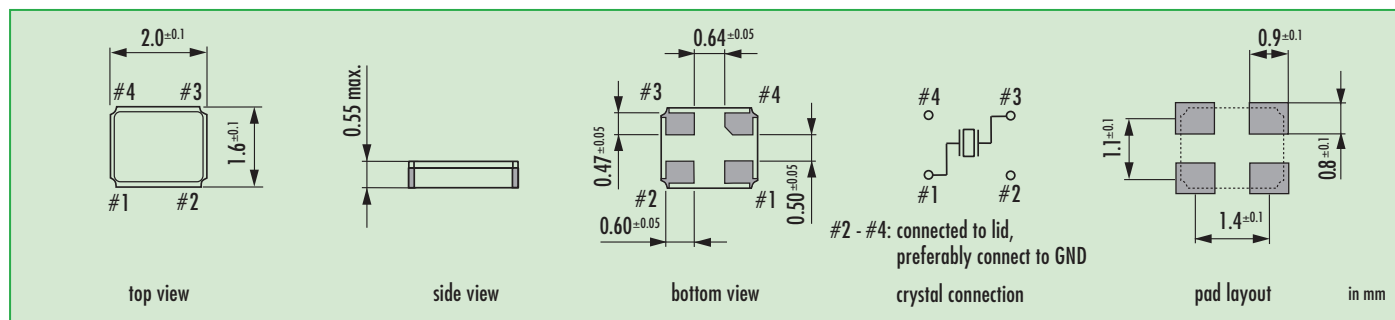
frequency with load capacitance code  
company code / date code / internal code

date code: year/month  
example: 5A = 2015 January

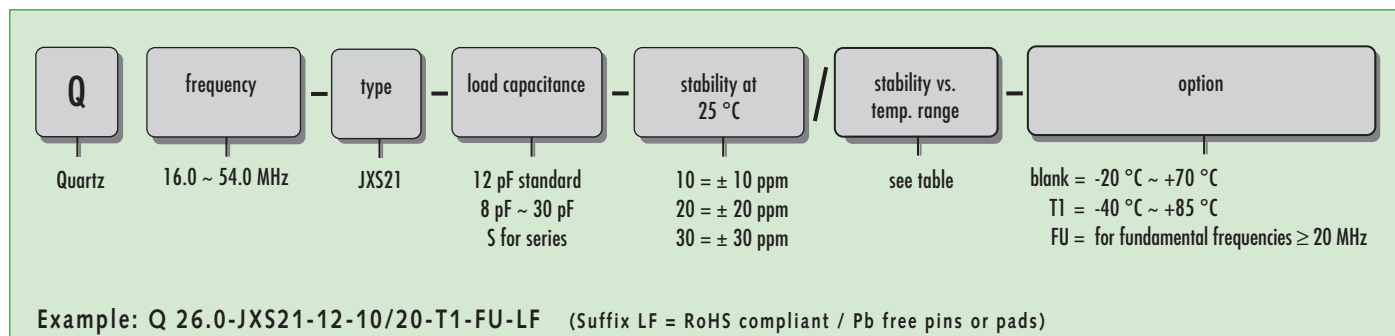
Jan.	Febr.	Mar.	Apr.	May	June
A	B	C	D	E	F

July	Aug.	Sept.	Oct.	Nov.	Dec.
G	H	J	K	L	M

## Dimensions

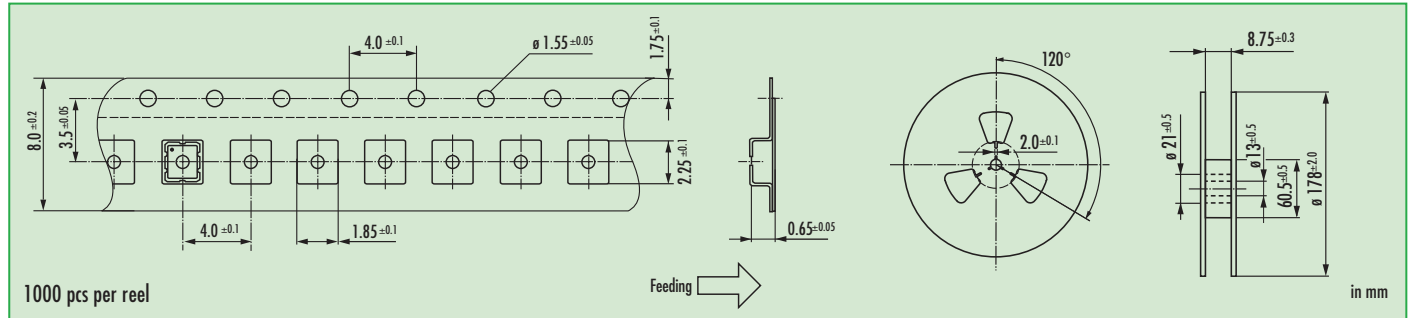


## Order Information

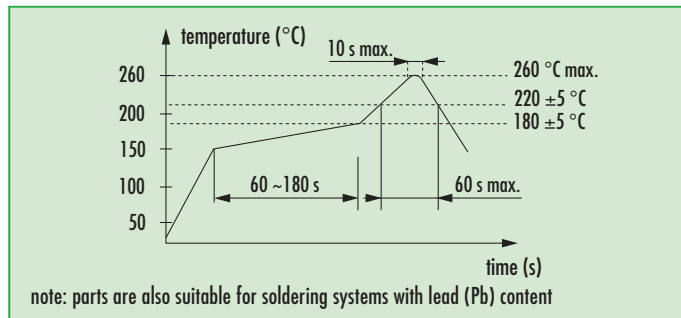


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## Taping Specification



## Reflow Soldering Profile



## Load Capacitance Codes

8 pF: k	14 pF: x	22 pF: g	series: s
9 pF: n	15 pF: j	24 pF: d	T: 3rd OT
10 pF: h	16 pF: b	25 pF: r	
11 pF: l	17 pF: t	27 pF: w	
12 pF: a	18 pF: f	30 pF: .	
13 pF: v	20 pF: c		

example 20.0 MHz / 12 pF: 20a00

\* hand soldering temperature should not exceed 280 °C