actual size

SMD Quartz Crystal · JXS42

4 Pad Version · 4.0 x 2.5 mm

- ± 10 ppm type available
- ceramic / metal package
- wave soldering temperature: 260 °C max.

RoHS 2002/95/EC — RoHS compliant

Pb free: pins / pads

General Data

type	JXS42
frequency range	12.0 ~ 12.99 MHz (others on request)
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
aging	< ± 3 ppm first year

ESR (series resistance Rs)

frequency in MHz	vibration mode	ESR max. in Ω	ESR typ. in Ω
12.0 ~ 12.999	fund. - AT	100	45
13.0 ~ 18.999	fund. - AT	80	40
19.0 ~ 24.999	fund. - AT	60	25
25.0 ~ 29.999	fund. - AT	50	25
30.0 ~ 39.999	fund. - AT	50	20
40.00 ~ 50.00	fund. - AT	40	20

Frequency Stability vs. Temperature

		± 10 ppm	± 15 ppm	± 20 ppm	± 30 ppm	± 50 ppm
-20 °C ~ +70 °C	STD.	○	○	○	●	○
-40 °C ~ +85 °C	T1		○	○	○	●

● standard
○ available

Marking

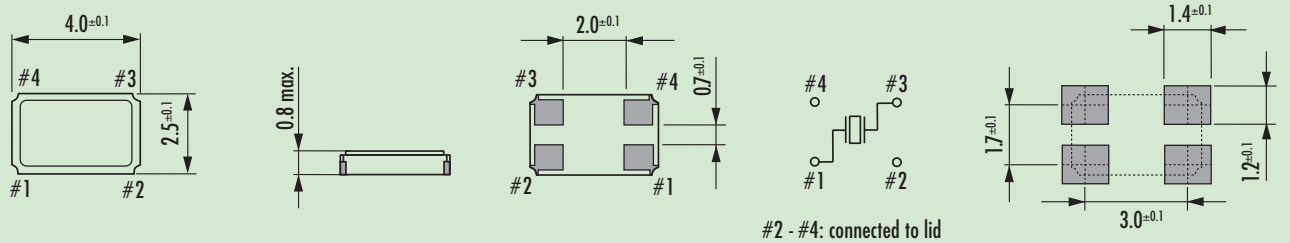
frequency with load capacitance code
company code / date code / internal code

date code: year/month
example: 6A = 2006 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



top view | side view | bottom view | crystal connection | pad layout | in mm

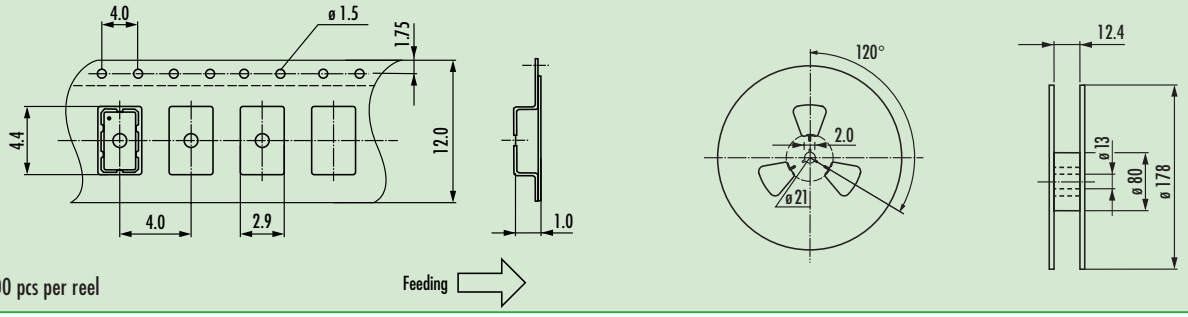
Order Information

Q	frequency	–	type	–	load capacitance	–	stability at 25 °C	/	stability vs. temp. range	–	option
Quartz	12.0 ~ 12.999 MHz		JXS42		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 FU= for fundamental frequencies ≥ 20 MHz

Example: Q 12.0-JXS42-12-30/30 (Suffix LF = RoHS compliant / Pb free pins or pads)

SMD Quartz Crystal · JXS42

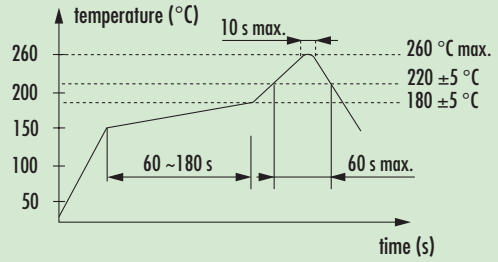
Taping Specification



1000 pcs per reel

in mm

Reflow Soldering Profile



note: parts are also suitable for soldering systems with lead (Pb) content

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