

actual size

SMD Quartz Crystal · JXS11

4 Pad Version · 1.6 x 1.2 mm

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

RoHS 2002/95/EC — RoHS compliant

Pb free: pins / pads

General Data

type	JXS11
frequency range	24.0 ~ 54.0 MHz (fund. AT-cut)
frequency tolerance at 25 °C	± 10 ppm / ± 20 ppm / ± 30 ppm
load capacitance C_L	8 pF standard (option: 8 pF ~ 30 pF / series)
shunt capacitance C_o	< 5 pF
storage temperature	-40 °C ~ +90 °C
drive level max.	100 µW (10 µW recommended)
aging	< ± 3 ppm first year (option: < ± 1 ppm first year for tol. ± 10 ppm)

ESR (series resistance Rs)

frequency in MHz	vibration mode	ESR max. in Ω	ESR typ. in Ω
24.0 ~ 25.999	fund. AT	200	100
26.0 ~ 29.999	fund. AT	150	70
30.0 ~ 39.999	fund. AT	120	60
40.0 ~ 54.000	fund. AT	60	40

Frequency Stability vs. Temperature

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

● standard
○ available

Marking

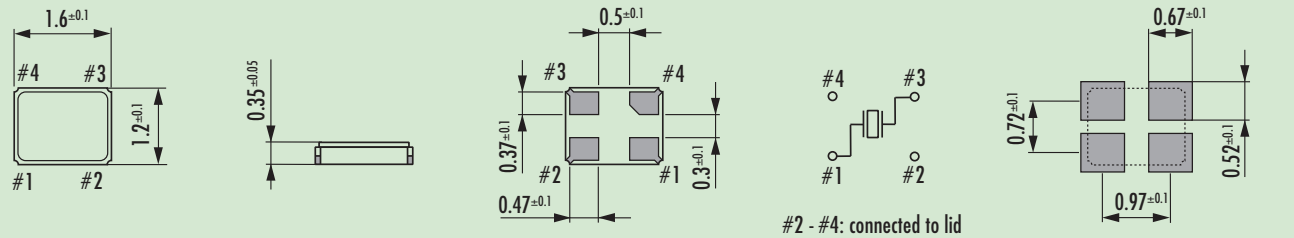
frequency with load capacitance code
company code / date code

date code: year/month
example: 3A = 2013 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 — #2 - #4: connected to lid — crystal connection — pad layout — in mm

Order Information

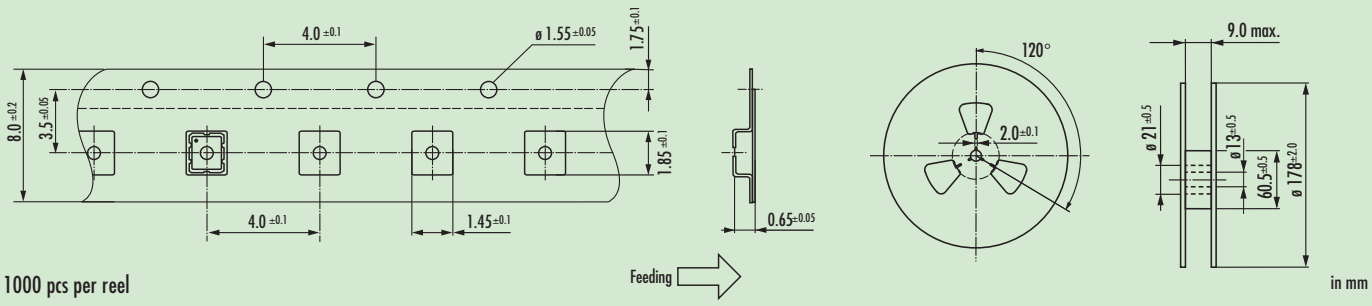
Q	frequency	type	load capacitance	stability at 25 °C	stability vs. temp. range	option
Quartz	24.0 ~ 54.0 MHz	JXS11	8 pF standard 8 pF ~ 30 pF S for series	10 = ± 10 ppm 20 = ± 20 ppm 30 = ± 30 ppm	see table	blank = -20 °C ~ +70 °C T1 = -40 °C ~ +85 °C T(-30/+85) = -30 °C ~ +85 °C FU = for fundamental frequencies ≥ 20 MHz

Example: Q 32.0-JXS11-12-30/30-FU-LF (Suffix LF = RoHS compliant / Pb free pins or pads)

Jauch Quartz GmbH • e-mail: info@jauch.de
full data can be found under: www.jauch.de / www.jauch.co.uk / www.jauch.fr / www.jauchusa.com
All specifications are subject to change without notice

SMD Quartz Crystal · JXS11

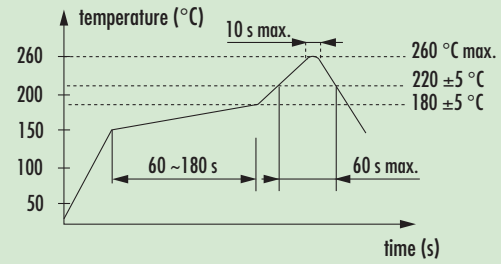
Taping Specification



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	
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 36.0 MHz / 12 pF: 36a0