



actual size

# SMD Quartz Crystal · JXS11

- 4 Pad Version, 1.6 x 1.2 mm
- ± 10 ppm type available
- special type for IoT available, see JXS11-WA datasheet
- EMI shielding possible by grounded lid
- ceramic / metal package



RoHS compliant



Pb free



REACH compliant



Conflict mineral free

## GENERAL DATA

TYPE	JXS11
frequency range	24.0 ~ 80.0 MHz (fund. AT-cut)
frequency tolerance at 25 °C	± 10 ppm / ± 20 ppm / ± 30 ppm
load capacitance $C_L$	8 pF standard (option: 6 pF ~ 30 pF / series)
shunt capacitance $C_0$	< 5 pF
storage temperature	-40 °C ~ +105 °C
drive level max.	100 µW (10 µW recommended)
aging	< ± 3 ppm first year (option: < ± 1 ppm first year for tol. ± 10 ppm)

TABLE 1: 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			○	○	○
-40 °C ~ +105 °C	T2				○	○

○ available

## DIMENSIONS

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

#2-#4: connected to lid, preferably connect to GND

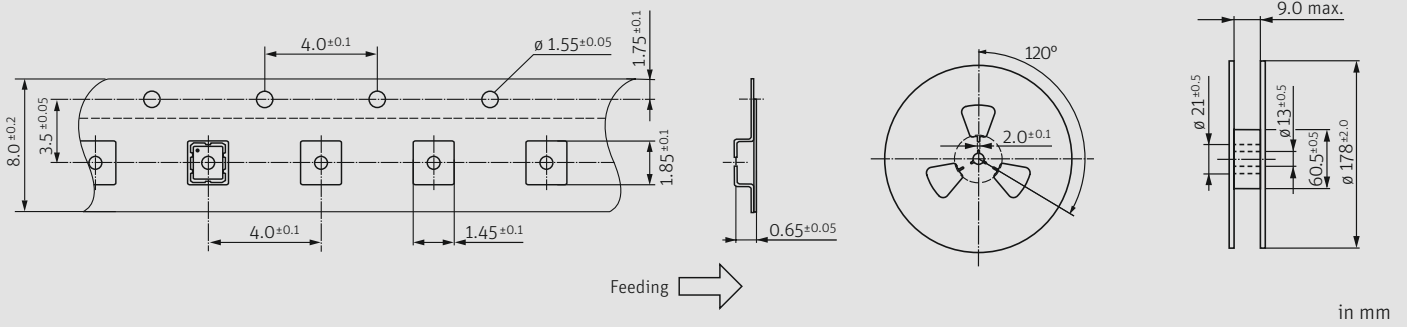
## ORDER INFORMATION

Q	frequency	type	load capacitance	tolerance at 25 °C	stability vs. temp. range	option
Quartz	24.0 ~ 80.0 MHz	JXS11	8 pF standard 6 pF ~ 30 pF available S for series	10 = ± 10 ppm 20 = ± 20 ppm 30 = ± 30 ppm	10 = ± 10 ppm 15 = ± 15 ppm 20 = ± 20 ppm 30 = ± 30 ppm 50 = ± 50 ppm	blank = -20 °C ~ +70 °C T(-30/+85) = -30 °C ~ +85 °C T1 = -40 °C ~ +85 °C T2 = -40 °C ~ +105 °C FU = for fundamental frequencies ≥ 20 MHz

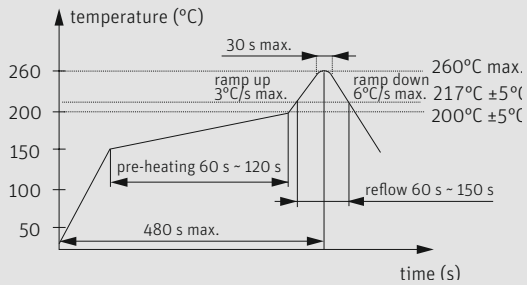
**Example: Q 32.0-JXS11-8-30/30-T1-FU-LF** (Suffix LF = RoHS compliant / Pb free)

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## TAPING SPECIFICATION



## REFLOW SOLDERING PROFILE



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

## LOAD CAPACITANCE CODES

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

example 32.0 MHz / 8 pF: 32k0