



actual size

# SMD Quartz Crystal · JXS75

- 4 pad version, 7.0 x 5.0 mm
- ± 10 ppm type available
- EMI shielding possible by grounded lid
- reflow soldering temperature: 260 °C max.
- ceramic / metal package



RoHS compliant



Pb free



REACH compliant



Conflict mineral free

## GENERAL DATA

TYPE	JXS75
frequency range	5.53 ~ 54.0 MHz (fund. AT-cut) 30.0 ~ 156.25 MHz (3rd OT AT-cut) 60.0 ~ 170.00 MHz (fund. AT-cut) 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 $C_0$	< 7 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
5.53 ~ 5.99	fund. - AT	ask for spec.	ask for spec.
6.0 ~ 6.99	fund. - AT	80	30
7.0 ~ 9.99	fund. - AT	60	25
10.0 ~ 15.99	fund. - AT	40	25
16.0 ~ 21.99	fund. - AT	30	20
22.0 ~ 24.99	fund. - AT	30	15
25.0 ~ 54.00	fund. - AT	30	10
30.0 ~ 156.25	3rd OT - AT	ask for spec.	ask for spec.

## TABLE 1: FREQUENCY STABILITY VS. TEMPERATURE

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

○ available \* T2 only < 54.0 MHz

## MARKING

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

date code: year/month; A ~ M: Jan. - Dec.; example: 8A = 2018 January  
7: 2017 8: 2018 9: 2019 0: 2020 1: 2021 2: 2022

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

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

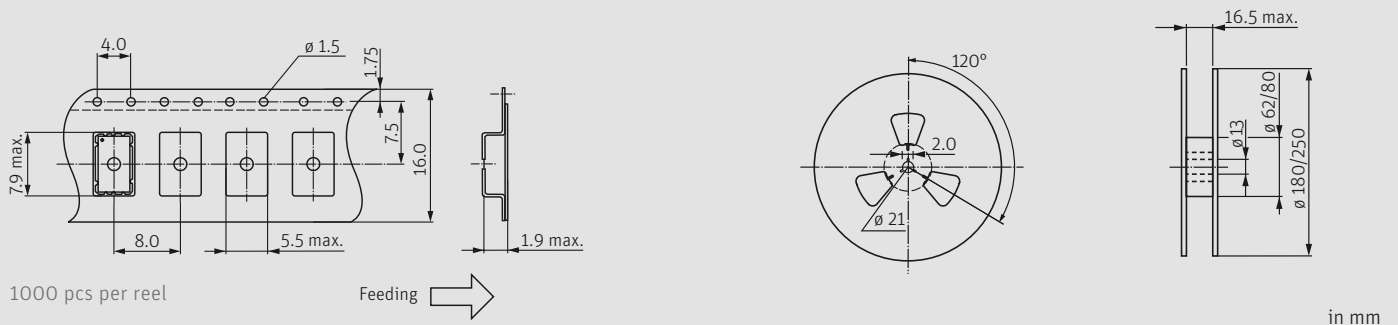
## ORDER INFORMATION

Q	frequency	type	load capacitance	tolerance at 25 °C	stability vs. temp. range	option
Quartz	5.53 ~ 170.0 MHz	JXS75	12 pF standard 8 pF ~ 30 pF available S for series	10 = ± 10 ppm 30 = ± 30 ppm	10 = ± 10 ppm 15 = ± 15 ppm 20 = ± 20 ppm 30 = ± 30 ppm 50 = ± 50 ppm 100 = ± 100 ppm	blank = -20 °C ~ +70 °C T1 = -40 °C ~ +85 °C T2 = -40 °C ~ +105 °C FU = for fundamental frequencies ≥ 20 MHz 3OT = 3rd overtone

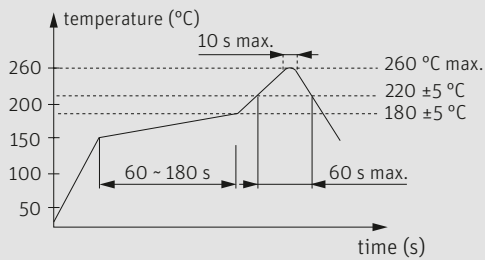
**Example: Q 28.0-JXS75-12-30/30-T1-FU-LF** (Suffix LF = RoHS compliant / Pb free)

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## TAPING SPECIFICATION



## REFLOW SOLDERING PROFILE



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

## LOAD CAPACITANCE CODES

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