

actual size

Oscillator · JO22 · 3.3 V

SMD Oscillator with Stop Function · 2.5 x 2.0 mm

- low current consumption
- low phase noise type for WLAN available**
- reflow soldering temperature: 260 °C max.
- ultra flat ceramic / metal package

RoHS 2002/95/EC compliant

Pb free: pins / pads

General Data

type		JO22 3.3 V
frequency range		0.75 ~ 50.0 MHz
frequency stability over all*		± 25ppm ~ ± 100ppm
		see table 1
current consumption		see table 2
supply voltage V_{DC}		3.3 V ± 5%
temperature	operating	-20 °C ~ +70 °C / -40 °C ~ +85 °C
	storage	-55 °C ~ +100 °C
output	rise & fall time	see table 3
	load max	15pF
	current max.	4mA
	low level max.	0.1 x V_{DC}
	high level min.	0.9 x V_{DC}
output enable time max.		10ms
output disable time max.		50µs
start-up time max.		10ms
standby function		stop
standby current max.		5µA
phase jitter 12 kHz ~ 20.0 MHz		< 1.0ps RMS**
symmetry at 0.5 x V_{DC}		45% ~ 55% max.

** detailed data and available frequencies for option - LP upon request

Table 1: Frequency Stability Code

stability code	A ± 100 ppm	B ± 50 ppm	G ± 30 ppm	C ± 25 ppm		
-20 °C ~ +70 °C		○	○	Δ		
-40 °C ~ +85 °C	○	○	○			

● standard ○ available Δ excludes aging

* includes stability at 25 °C, operating temp. range, supply voltage change, shock and vibration, aging 1st year.

Table 2: Current Consumption max.

3.3 V: current at 15pF load:

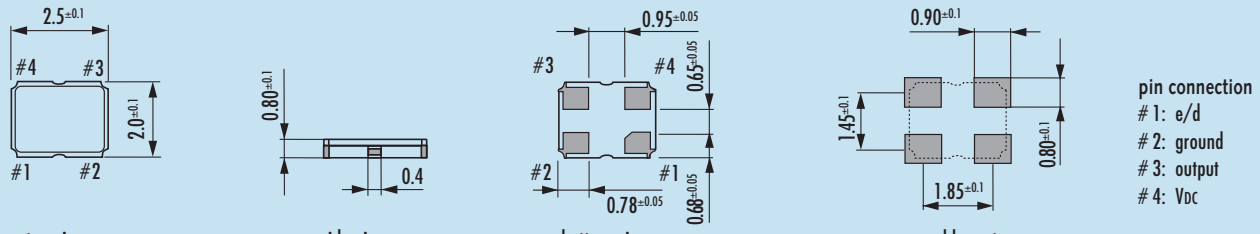
0.75 ~ 19.9 MHz	6 mA
20.00 ~ 39.9 MHz	7 mA
40.00 ~ 50.0 MHz	8 mA

Table 3: Rise & Fall Time max.

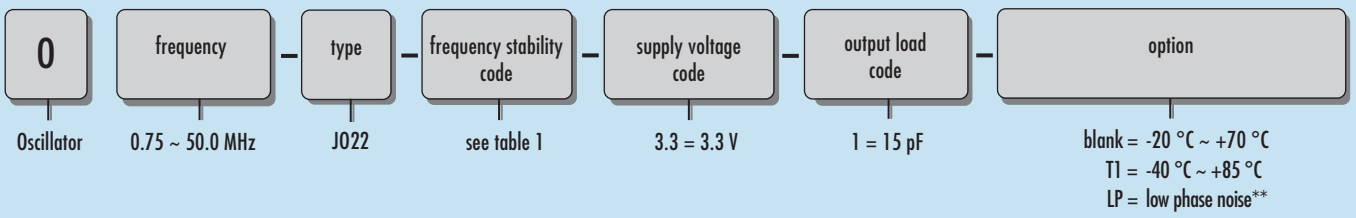
5 ns: 0.75 ~ 50.0 MHz

note:
- specific data on request
- rise time: 0.1 V_{DC} ~ 0.9 V_{DC}
- fall time: 0.9 V_{DC} ~ 0.1 V_{DC}

Dimensions



Order Information

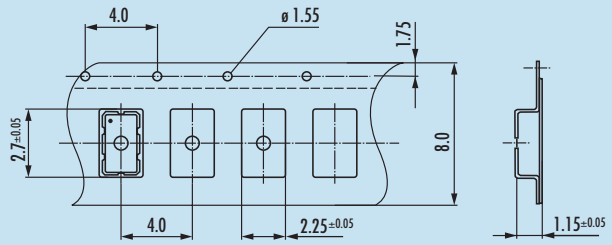


Example: O 20.0-JO22-B-3.3-1 (LF = RoHS compliant / Pb free pins or pads)

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

Oscillator · JO22 · 3.3 V · Stop Function

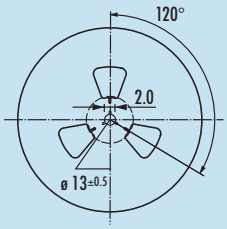
Taping Specification

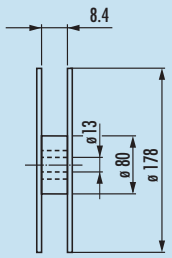


500 pcs per reel

Feeding

in mm





in mm

Enable / Disable Function

pin #1 (e/d control)	pin #3 (output)
open	active
high "1" ($V_{IH} \geq 0.8\ V_{DC}$)	active
low "0" ($V_{IL} \leq 0.2\ V_{DC}$)	high impedance

stop function:
- oscillator stops
- output high impedance

Marking

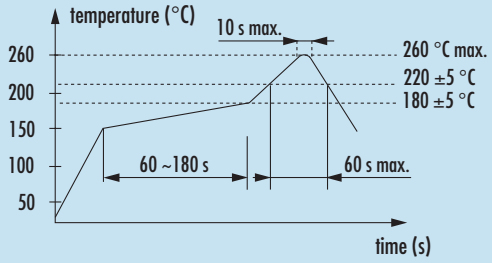
frequency
type / date code

date code:
A ~ M: Jan.- Dec.
7: 2007
8: 2008
9: 2009

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

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

Reflow Soldering Profile



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

Packing Note

- standard packing units are 1000 pieces per reel
- non-multiple packing units are only supplied taped / bulk