



actual size

Oscillator JO32 · 1.8 V ~ 3.3 V

- High Frequency SMD Oscillator · 3.2 x 2.5 mm
- Variable supply voltage 1.8 V ~ 3.3 V
- Low phase jitter, no PLL used
- LVCMOS / HCMOS compatible output
- Seam sealed ceramic/metal package



RoHS compliant



Pb free



REACH compliant



Conflict mineral free

GENERAL DATA

TYPE		JO32 1.8 V ~ 3.3 V High Frequency
frequency range		50.0 ~ 170.0 MHz (15 pF max.)
frequency stability over all*		± 25 ppm ~ ± 100 ppm
		see table 1
current consumption		see table 2
supply voltage V _{DC}		1.8 V -10% ~ 3.3 +10% variable
temperature	operating	-20 °C ~ +70 °C up to -40 °C ~ +125 °C (table 1)
	storage	-55 °C ~ +125 °C
output	rise & fall time	3 ns max. (1.8 V) / 2.5 ns max. (≥ 2.5 V)
	load max.	15 pF
	current max.	8.0 mA
	low level max.	0.4 V
	high level min.	V _{DC} - 0.4 V
output enable time max. / typ.		5 ms / 2 ms
output disable time max.		200 ns
start-up time max. / typ.		5 ms / 2 ms (t ₀ when V _{DC} > 1.62 V)
standby function		stop
standby current max.		20 µA
phase jitter 12 kHz ~ 20.0 MHz		< 0.3 ps RMS
symmetry at 0.5 x V _{DC}		45% ~ 55% max. (ref. +25 °C)

note: rise time: 0.1 VDC ~ 0.9 VDC / fall time: 0.9 VDC ~ 0.1 VDC

TABLE 1: FREQUENCY STABILITY CODE

stability code		A ± 100 ppm	B ± 50 ppm	G ± 30 ppm	C ± 25 ppm
-20 °C ~ +70 °C		○	○	○	○
-40 °C ~ +85 °C	T1	○	○	○	
-40 °C ~ +105 °C	T2	○	○		
-40 °C ~ +125 °C	T3	○			

○ available

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

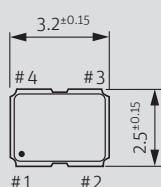
TABLE 2: CURRENT CONSUMPTION MAX.

Supply current max.	load	1.8 V	2.5 V	3.3 V
50.0 ~ 74.9 MHz	15pF	14.0 mA	17.0 mA	21.0 mA
75.0 ~ 99.9 MHz	15pF	15.0 mA	20.0 mA	24.0 mA
100.0 ~ 124.9 MHz	15pF	17.0 mA	23.0 mA	31.0 mA
125.0 ~ 170.9 MHz	15pF	20.0 mA	27.0 mA	34.0 mA

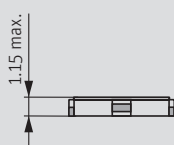
PACKAGING NOTE

- standard packing unit is 500 pieces per reel
- customized quantities on request

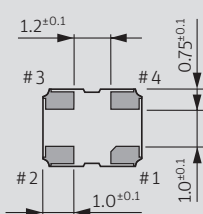
DIMENSIONS



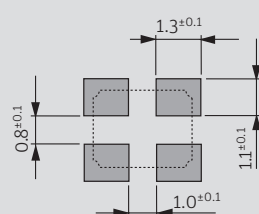
top view



side view



bottom view



pad layout

1: e/d
2: ground
3: output
4: V_{DC}

pin connection

in mm

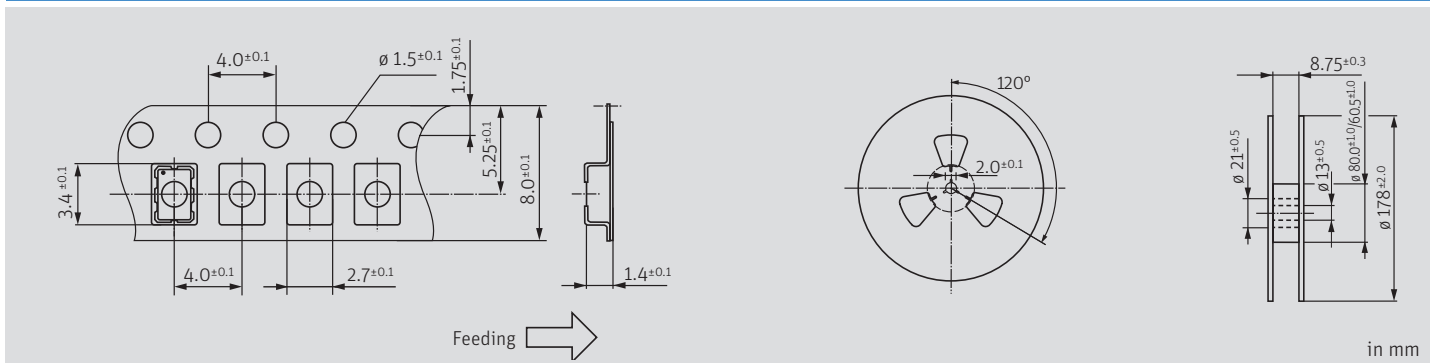
ORDER INFORMATION

0	frequency	type	frequency stability code	supply voltage code	output load code	option
Oscillator	50.0 ~ 170.0 MHz	JO32	see table 1	1V3 = 1.8 V ~ 3.3 V	1 = 15 pF	blank = -20 °C ~ +70 °C T1 = -40 °C ~ +85 °C T2 = -40 °C ~ +105 °C T3 = -40 °C ~ +125 °C

Example: 0 156.250-JO32-G-1V3-1-T1-LF (Suffix LF = RoHS compliant / Pb free)

Oscillator J032 · 1.8 V ~ 3.3 V · High Frequency · Stop Function

TAPING SPECIFICATION



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

company stability code / date code

date code: A ~ M: Jan. - Dec.

5: 2025 6: 2026 7: 2027 8: 2028 9: 2039 0: 2030

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

