



actual size

# Oscillator JO75 · 3.3 V

- Low Frequency Oscillator with Stop Function · 7.5 x 5.0 mm
- Temperature-stable type for RTC application
- LVCMOS / HCMOS compatible output
- Seam sealed ceramic/metal package



RoHS compliant



Pb free



REACH compliant



Conflict mineral free

GENERAL DATA		JO75 3.3 V
<b>TYPE</b>	<b>JO75 3.3 V</b>	
frequency range	12.0 kHz ~ 1.0 MHz (30 pF max.)	
frequency stability over all*	± 20 ppm ~ ± 100 ppm (see table 1)	
current consumption	see table 2	
supply voltage $V_{DC}$	3.3 V ± 10 %	
temperature	operating	-10 °C ~ +70 °C / -40 °C ~ +85 °C
	storage	-55 °C ~ +125 °C
output	rise & fall time	see table 3
	load max.	15 pF / 30 pF
	current max.	2 mA
	low level max.	0.1 x $V_{DC}$
	high level min.	0.9 x $V_{DC}$
output enable time max.	5 ms	
output disable time max.	150 ns	
start-up time max.	5 ms	
standby function	stop	
standby current max.	10 µA	
symmetry at 0.5 x $V_{DC}$	45% ~ 55% max.	

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

TABLE 1: FREQUENCY STABILITY CODE					
stability code	A	B	G	C	D
	± 100 ppm	± 50 ppm	± 30 ppm	± 25 ppm	± 20 ppm
-10 °C ~ +70 °C	○	○	○	○	△
-40 °C ~ +85 °C	○	○	○	△	

○ available △ excludes shock and vibration

TABLE 2: CURRENT CONSUMPTION MAX.	
Current at 15 pF load: 12.0 kHz ~ 1.0 MHz 10 mA	Current at 30 pF load: 12.0 kHz ~ 1.0 MHz 16 mA

TABLE 3: RISE & FALL TIME MAX.	
6 ns: 12.0 kHz ~ 1.0 MHz	<b>note:</b> - specific data on request - rise time: 0.1 $V_{DC}$ ~ 0.9 $V_{DC}$ - fall time: 0.9 $V_{DC}$ ~ 0.1 $V_{DC}$

STANDARD FREQUENCY
32.768 kHz

**DIMENSIONS**

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

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

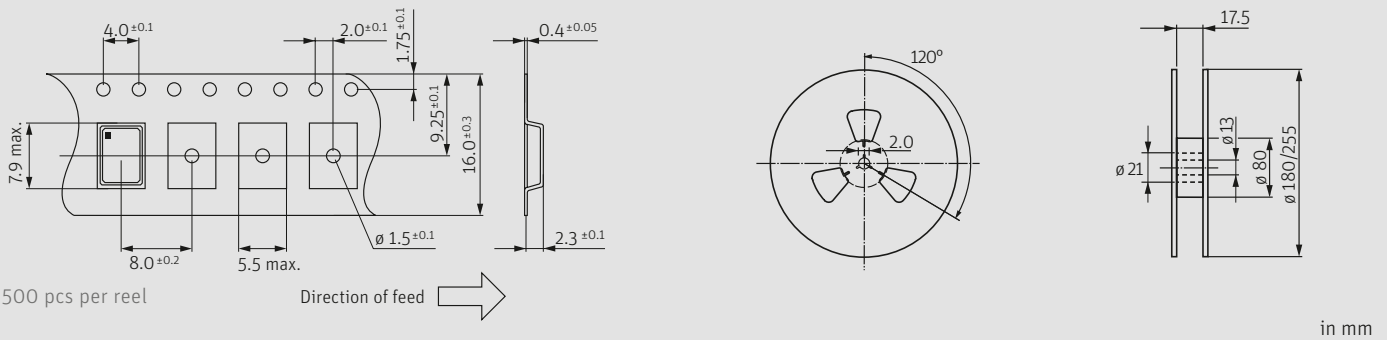
**ORDER INFORMATION**

<b>0</b>	frequency	type	frequency stability code	supply voltage code	output load code	option
Oscillator	0.012 ~ 1.0 MHz	JO75	see table 1	3.3 = 3.3 V	1 = 15 pF 2 = 30 pF	blank = -10 °C ~ +70 °C T1 = -40 °C ~ +85 °C

**Example: 0 0.032768-JO75-B-3.3-1** (Suffix LF = RoHS compliant / Pb free)

# Oscillator J075 · 3.3 V · Low Frequency

## 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

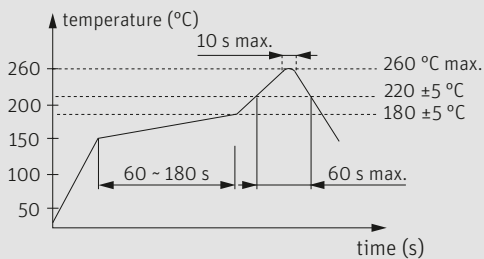
### company stability code / voltage data code

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

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

## REFLOW SOLDERING PROFILE



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

## PACKAGING NOTE

- standard packing unit is 500 pieces per reel
- non-multiple packing units are only supplied taped / bulk