



actual size

# Oscillator VCXO · LVDS

- SMD LVDS VCXO, 7.5 x 5.0 mm
- uses quartz crystal in MESA technology
- low phase noise + jitter
- complementary LVDS output, low EMI
- ceramic/metal package



RoHS compliant



Pb free



REACH compliant



Conflict mineral free

## GENERAL DATA

TYPE		JVD75A
frequency range		50.0 ~ 700.0 MHz
frequency stability over all*		± 25 ppm / ± 50 ppm (see table 1)
frequency pulling range min.		± 80 ppm
pulling control voltage		1.65 V ± 1.5 V**
pulling control input imped. min.		60 kΩ
current consumption		80 mA max.
supply voltage V <sub>DC</sub>		3.3 V ± 5%
temperature	operating	-10 °C ~ +70 °C / -40 °C ~ +85 °C
	storage	-40 °C ~ +85 °C
output	rise & fall time	1.0 ns (20% ~ 80% of V <sub>pp</sub> )
	load nom.	100 Ω differential
	swing min.	0.35 V <sub>p-p</sub>
	offset voltage	1.25 V ± 0.125 V
standby function		yes
output enable time max.		10 ms
output disable time max.		150 ns
start-up time max.		10 ms
phase jitter 12 kHz ~ 20.0 MHz		< 1.0 ps RMS
symmetry at 50% of V <sub>pp</sub>		45% ~ 55% typ. (40% ± 60% max.)

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

## TABLE 1: FREQUENCY STABILITY CODE

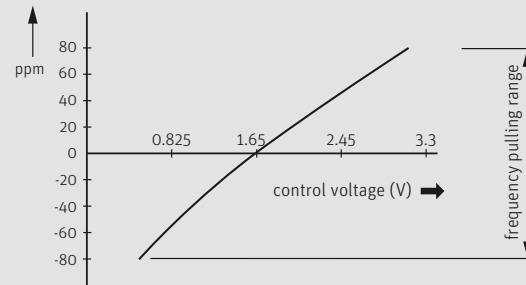
stability code	B	C		
	± 50 ppm	± 25 ppm		
-10 °C ~ +70 °C	○	○		
-40 °C ~ +85 °C	○			

○ available

## ENABLE / DISABLE FUNCTION

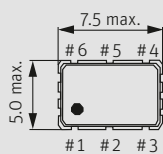
pin #2 (e/d control)	pin #4 / #5 (outputs)
open or ≥ 2.4 V	active
gnd or ≥ 0.4 V	high impedance

## CONTROL VOLTAGE CHARACTERISTIC

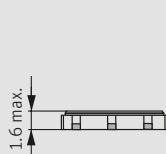


\*\* To avoid phase noise or FM modulation in the output frequency spectrum, we recommend to feed the V<sub>control</sub> input pin by a low source impedance

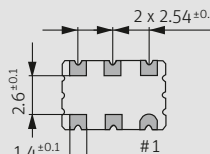
## DIMENSIONS



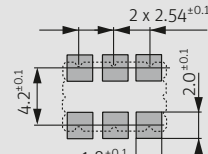
top view



side view



bottom view



pad layout

- # 1: V<sub>control</sub>
- # 2: e/d
- # 3: ground
- # 4: output 1
- # 5: output 2
- # 6: V<sub>CC</sub>

pin connection

in mm

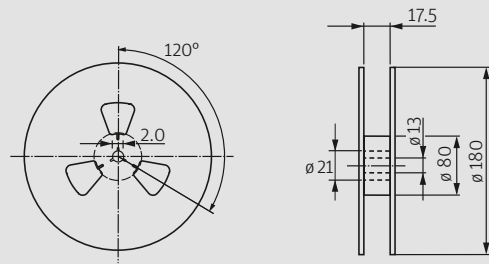
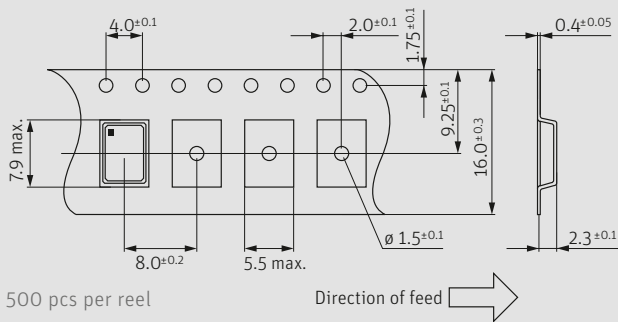
## ORDER INFORMATION

0	frequency	type	frequency stability code	supply voltage	pulling range in ppm	pulling range in ppm
Oscillator	50.0 ~ 700.0 MHz	JVD75A	B = ± 50 ppm C = ± 25 ppm	3.3 = 3.3 V	08 = ± 80 ppm	blank = -10 °C ~ +70 °C T1 = -40 °C ~ +85 °C

Example: 0 155.520-JVD75A-B-3.3-08-LF (Suffix LF = RoHS compliant / Pb free)

# Oscillator VCXO · LVDS · JVD75A

## TAPING SPECIFICATION



in mm

## PACKAGING NOTE

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

## MARKING

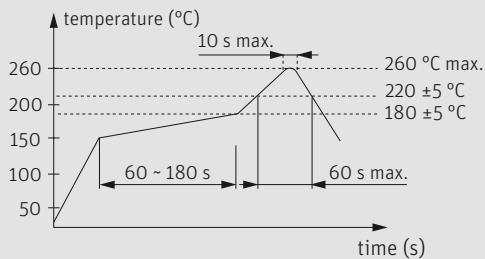
**type**  
**frequency**  
**company / date code**

date 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