



actual size

Oscillator VCXO · PECL

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



RoHS compliant



Pb free



REACH compliant



Conflict mineral free

GENERAL DATA

TYPE		JVE75A
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		120 mA max.
supply voltage V _{DC}		3.3 V ± 5%
temperature	operating	-10 °C ~ +70 °C / -40 °C ~ +85 °C
	storage	-40 °C ~ +85 °C
output	rise & fall time	0.5 ns (20% ~ 80% of V _{pp})
	load nom.	50 Ω at 1.3 V
	low level max.	1.7 V
	high level min.	2.2 V
standby function		yes
output enable time max.		10 ms
output disable time max.		50 ns
start-up time max.		10 ms
phase jitter 12 kHz ~ 20.0 MHz		< 1.0 ps RMS
symmetry at 50% of V _{pp}		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

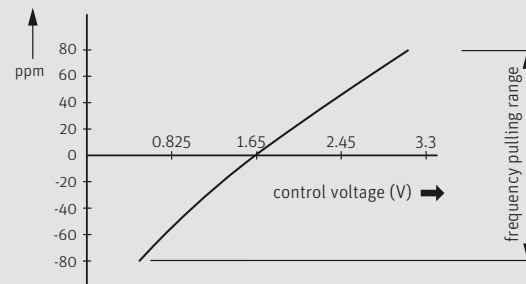
stability code	B	C		
	± 50 ppm	± 25 ppm		
-10 °C ~ +70 °C	○	○		
-40 °C ~ +85 °C	○			

○ available

ENABLE / DISABLE FUNCTION

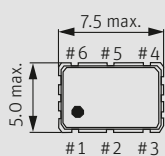
pin #2 (e/d control)	pin #4 / #5 (outputs)
open or ≥ 2.4 V	active
gnd or ≥ 0.4 V	high impedance

CONTROL VOLTAGE CHARACTERISTIC

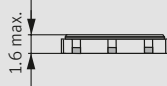


** To avoid phase noise or FM modulation in the output frequency spectrum, we recommend to feed the V_{control} input pin by a low source impedance

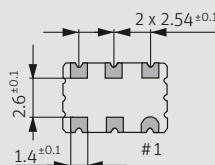
DIMENSIONS



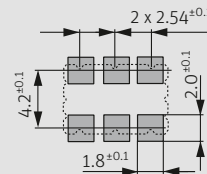
top view



side view



bottom view



pad layout

- # 1: V_{control}
- # 2: e/d
- # 3: ground
- # 4: output 1
- # 5: output 2
- # 6: V_{CC}

pin connection

in mm

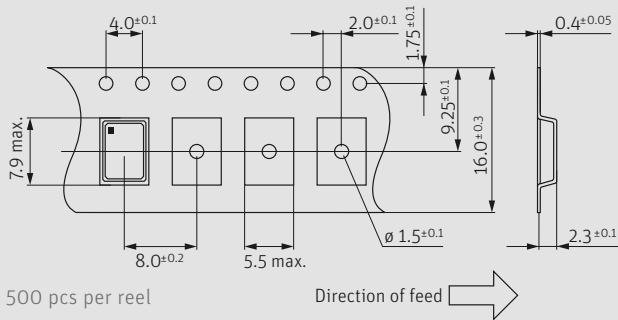
ORDER INFORMATION

0	frequency	type	frequency stability code	supply voltage	pulling range in ppm	pulling range in ppm
Oscillator	50.0 ~ 700.0 MHz	JVE75A	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-JVE75A-B-3.3-08-LF (Suffix LF = RoHS compliant / Pb free)

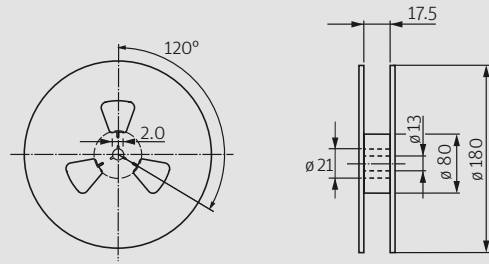
Oscillator VCXO · PECL · JVE75A

TAPING SPECIFICATION



500 pcs per reel

Direction of feed →



in mm

PACKAGING NOTE

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

MARKING

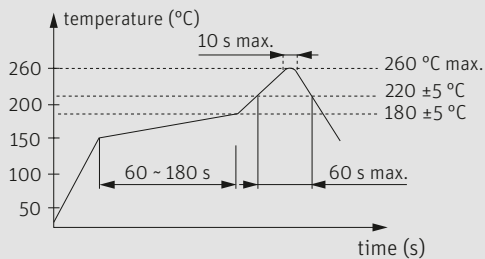
type
frequency
company / date code

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