



actual size

Oscillator JV75 · VCXO · 5.0 V

- SMD Voltage Control Crystal Oscillator, 7.5 x 5.0 mm
- two pinout versions available
- ceramic/metal package



RoHS compliant



Pb free



REACH compliant



Conflict mineral free

GENERAL DATA		
TYPE	JV75 5.0 V	
frequency range	1.0 ~ 80.0 MHz	
frequency stability over all*	± 25 ppm ¹⁾ / ±50 ppm	
	see table 1	
current consumption	see table 2	
supply voltage V _{DC}	5.0 V ± 5%	
frequency pulling range min.	± 50 ppm / ± 100 ppm / ± 150 ppm ²⁾	
pulling control voltage	2.5 V ± 2.0 V**	
pulling linearity max.	< 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.	15pF
	current max.	8 mA
	low level max.	0.1 x V _{DC}
	high level min.	0.9 x V _{DC}
standby function	yes	
start-up time max.	10 ms	
symmetry at 0.5 x V _{DC}	45% ~55% max.	

¹⁾ not available > 52.0 MHz ²⁾ on request, if < 52.0 MHz

* 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

TABLE 2: CURRENT CONSUMPTION MAX.	
Current at 15pF load:	
1.0 ~ 17.9 MHz	20 mA
18.0 ~ 35.9 MHz	30 mA
36.0 ~ 51.9 MHz	40 mA
52.0 ~ 80.0 MHz	50 mA

TABLE 3: RISE & FALL TIME MAX.		
5.0 ns:	1.0 ~ 39.9 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}
4.0 ns:	40.0 ~ 80.0 MHz	

** RECOMMENDATION

To avoid phase noise or FM modulation in the output frequency spectrum, we recommend to feed the Vcontrol input pin by a low source impedance.

DIMENSIONS

top view

side view

bottom view

pad layout

standard pin connection B

1: Vcontrol
2: e/d
3: ground
4: output
5: nc
6: V_{DD}

optional pin connection A

1: Vcontrol
2: nc
3: ground
4: output
5: e/d
6: V_{DD}

in mm

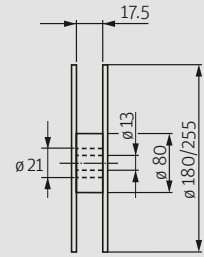
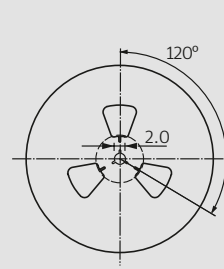
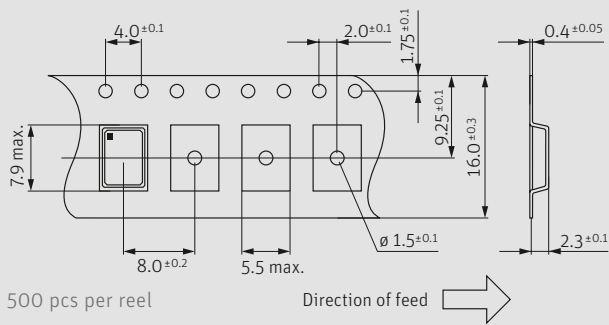
ORDER INFORMATION

0	frequency	type	frequency stability code	supply voltage	pulling range	pin version	option
Oscillator	1.0 ~ 80.0 MHz	JV75	C = ±25 ppm B = ±50 ppm	5.0 = 5.0 V	05 = ± 50 ppm 10 = ± 100 ppm 15 = ± 150 ppm ²⁾ ²⁾ on request, if <52.0 MHz	B = standard A = optional	blank = -10 °C ~ +70 °C T1 = -40 °C ~ +85 °C

Example: 0 20.0-JV75-B-5.0-10-B (Suffix LF = RoHS compliant / Pb free)

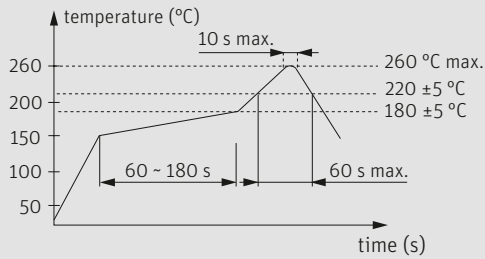
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TAPING SPECIFICATION



in mm

REFLOW SOLDERING PROFILE



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

MARKING

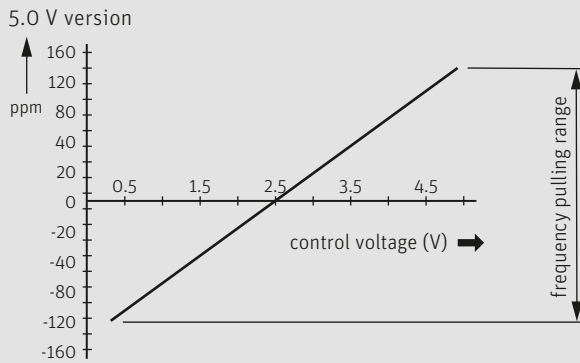
type / frequency
company code / data code

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

CONTROL VOLTAGE CHARACTERISTIC



PACKAGING NOTE

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

TABLE 1: FREQUENCY STABILITY CODE

pin #2/#5	pin #4
open or high	oscillation
gnd or low	high impedance