



actual size

Oscillator JV75 · VCXO · 3.3 V

- SMD Voltage Control Crystal Oscillator, 7.5 x 5.0 mm
- two pinout versions available
- reflow soldering temperature: 260 °C max.
- ceramic/metal package



RoHS compliant



Pb free



REACH compliant



Conflict mineral free

GENERAL DATA		
TYPE	JV75 3.3 V	
frequency range	1.0 ~ 125.0 MHz	
frequency stability over all*	± 25 ppm ¹⁾ / ±50 ppm	
	see table 1	
current consumption	see table 2	
supply voltage V _{DC}	3.3 V ± 10 %	
frequency pulling range min.	± 50 ppm / ± 100 ppm ²⁾ / ± 150 ppm ³⁾	
pulling control voltage	1.65 V ± 1.65 V**	
pulling linearity max.	± 10 %	
temperature	operating	-10 °C ~ +70 °C / -40 °C ~ +85 °C
	storage	-40 °C ~ +85 °C
output	rise & fall time	see table 3
	load max.	15pF
	current max.	4 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% typ. (40% ~ 60% max.)	

¹⁾ not available > 52.0 MHz ²⁾ not available > 80.0 MHz ³⁾ 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 ~ 29.9 MHz	15 mA
30.0 ~ 44.9 MHz	20 mA
45.0 ~ 51.9 MHz	25 mA
52.0 ~ 125.0 MHz	35 mA

TABLE 3: RISE & FALL TIME MAX.		
6.0 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}
5.0 ns:	40.0 ~ 125.0 MHz	

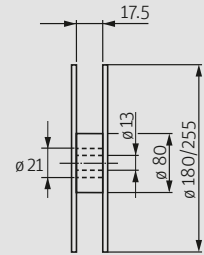
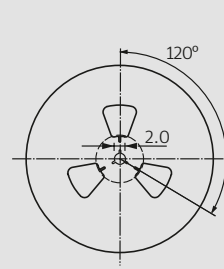
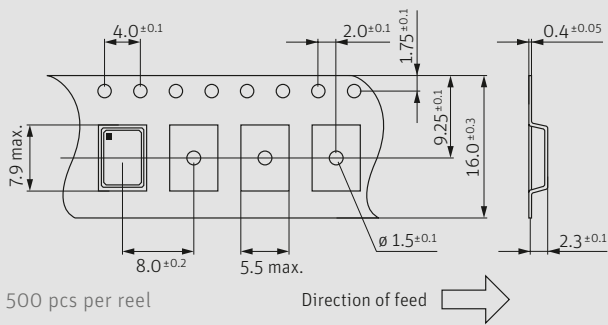
**** RECOMMENDATION**
 To avoid phase noise or FM modulation in the output frequency spectrum, we recommend to feed the Vcontrol input pin by a low source impedance.

DIMENSIONS			
<p>top view</p>	<p>side view</p>	<p>bottom view</p>	<p>pad layout</p>
<p>standard pin connection B</p> <p># 1: Vcontrol # 2: e/d # 3: ground # 4: output # 5: nc # 6: V_{DD}</p>		<p>optional pin connection A</p> <p># 1: Vcontrol # 2: nc # 3: ground # 4: output # 5: e/d # 6: V_{DD}</p>	
in mm			

ORDER INFORMATION							
0	frequency	type	frequency stability code	supply voltage	pulling range	pin version	option
Oscillator	1.0 ~ 125.0 MHz	JV75	C = ±25 ppm ¹⁾ B = ±50 ppm	3.3 = 3.3 V	05 = ± 50 ppm 10 = ± 100 ppm ²⁾ 15 = ± 150 ppm ³⁾	B = standard A = optional	blank = -10 °C ~ +70 °C T1 = -40 °C ~ +85 °C
			¹⁾ not available > 52.0 MHz			²⁾ not available > 80.0 MHz	³⁾ on request, if < 52.0 MHz
Example: 0 20.0-JV75-C-3.3-10-B (Suffix LF = RoHS compliant / Pb free)							

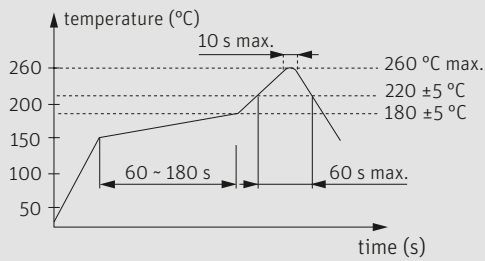
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TAPING SPECIFICATION



in mm

REFLOW SOLDERING PROFILE



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

MARKING

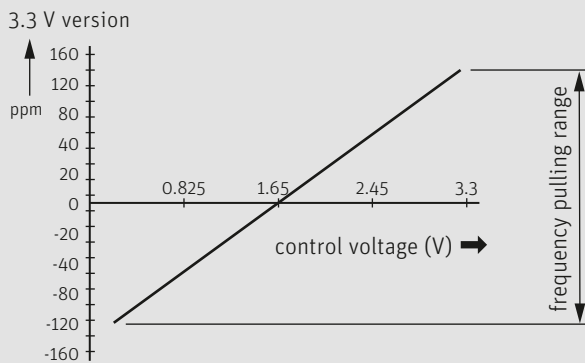
type / frequency
company code / data code

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 $\geq 0.7 V_{DC}$	enable
gnd or $\geq 0.3 V_{DC}$	high impedance