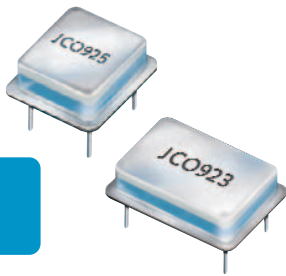




actual size



Oscillator · VCXO · 5.0 V

Voltage Control Crystal Oscillator

- pulling range up to ± 200 ppm min.
- soldering temperature: 260 °C max.
- full metal package DIP8/DI14



General Data

type	JCO923 / JCO925 5.0 V	
frequency range	1.84320 ~ 125.0 MHz (JCO923)	
	1.84320 ~ 40.00 MHz (JCO925)	
frequency stability over all*	± 25 ppm / ± 50 ppm (table 1)	
current consumption	see table 2	
supply voltage V_{DC}	5.0 V $\pm 10\%$	
frequency pulling range min.	± 100 ppm / ± 150 ppm / ± 200 ppm*	
pulling control voltage	2.5 V ± 2.5 V	
pulling linearity	<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 / 30pF (< 40 MHz)
	current max.	16mA
	low level max.	+0.5 V
	high level min.	$V_{DC} - 0.5$ V
start-up time max.	10ms	
symmetry at $0.5 \times V_{DC}$	45% ~ 55% typ. (40% ~ 60% max.)	

* ± 200 ppm on request.

Table 1: Frequency Stability Code

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

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

Table 2: Current Consumption max.

Current at 15pF load:		Current at 30pF load:	
1.8432 ~ 19.9 MHz	20 mA	1.8432 ~ 19.9 MHz	25 mA
20.0 ~ 39.9 MHz	30 mA	20.0 ~ 40.0 MHz	35 mA
40.0 ~ 65.9 MHz	40 mA		
66.0 ~ 79.9 MHz	50 mA		
80.0 ~ 125.0 MHz	60 mA		

Table 3: Rise & Fall Time max.

6.0 ns: 1.8432 ~ 39.9 MHz	note: - specific data on request - rise time: $0.1 V_{DC} \sim 0.9 V_{DC}$ - fall time: $0.9 V_{DC} \sim 0.1 V_{DC}$
5.0 ns: 40.0 ~ 79.9 MHz	
4.0 ns: 80.0 ~ 125.0 MHz	

Dimensions JCO 923 / 925

JCO923

top view

side view

bottom view

pin connection

- # 1: control voltage
- # 7: ground
- # 8: output
- # 14: supply voltage

JCO925

top view

side view

bottom view

pin connection

- # 1: control voltage
- # 4: ground
- # 5: output
- # 8: supply voltage

Order Information

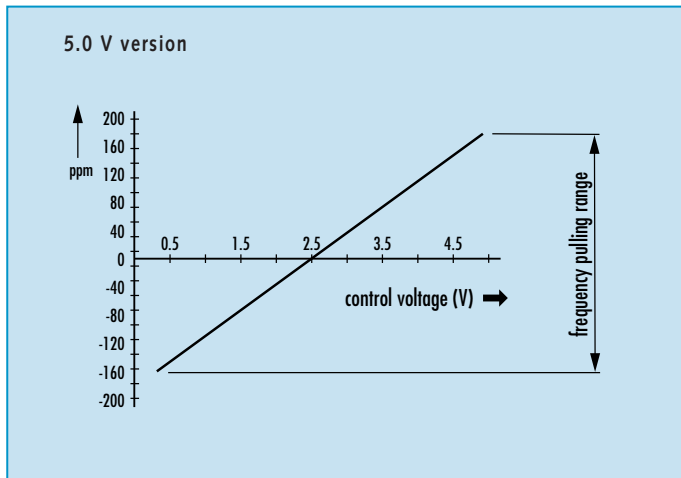
0	frequency in MHz	type	pulling range in ppm	frequency stability in ppm	option
Oscillator	1.84320 ~ 125.0 MHz	JCO923 JCO925	100 = ± 100 ppm std. 150 = ± 150 ppm 200 = ± 200 ppm on request	25 = ± 25 ppm 50 = ± 50 ppm	blank = -10 °C ~ +70 °C T1 = -40 °C ~ +85 °C

Example: O 27.0-JCO923-100-25 (LF = RoHS compliant / Pb free pins or pads)



Oscillator · VCXO · 5.0 V

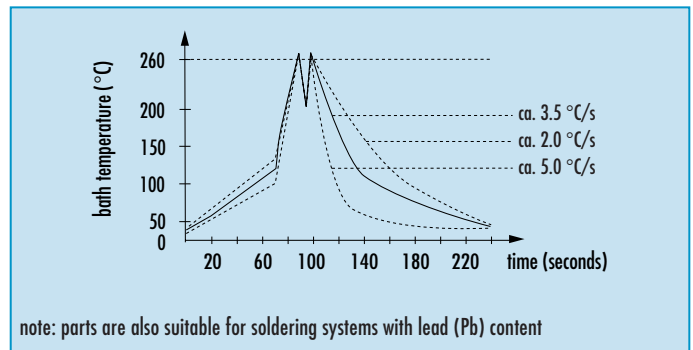
Control Voltage Characteristic



Packaging

JC0923	packed in antistatic plastic tubes, 25 pcs
JC0925	packed in antistatic plastic tubes, 40 pcs

Wave Soldering Profile



Marking

type
frequency
company code / date code