

# Oscillator · JCO · 3.3 V

## Pin Type Oscillator



actual size

- soldering temperature: 260 °C max.
- metal package

### General Data

type		JCO8 / JCO14 3.3 V
frequency range		1.0 ~ 160.0 MHz (15pF max.)
		1.0 ~ 50.00 MHz (15pF~30pF max.)
frequency stability over all		± 15ppm ~ ± 100ppm (table 1)
current consumption		see table 2
supply voltage V <sub>DC</sub>		3.3 V ± 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
	current max.	8mA
	low level max.	+0.5 V
	high level min.	V <sub>DC</sub> -0.5 V
output enable time max.		10ms
output disable time max.		100ns
start-up time max.		10ms
standby function		optional
phase jitter 12 kHz ~ 20.0 MHz		< 1.0ps RMS
symmetry at 0.5 x V <sub>DC</sub>		45% ~ 55% typ. (40% ~ 60% max.)

Table 1: Frequency Stability Code

stability code	A	B	G	C	D	E
	± 100 ppm	± 50 ppm	± 30 ppm	± 25 ppm	± 20 ppm	± 15 ppm
-10 °C ~ +70 °C	○	●	○	○	○	○
-40 °C ~ +85 °C	●	○	○	○		
	● standard ○ on request					

Table 2: Current Consumption max.

Current at 15pF load:		Current at 30pF load:	
1.0 ~ 29.9 MHz	10 mA	1.0 ~ 29.9 MHz	20 mA
30.0 ~ 49.9 MHz	15 mA	30.0 ~ 50.0 MHz	35 mA
50.0 ~ 89.9 MHz	30 mA		
90.0 ~ 124.9 MHz	45 mA		
125.0 ~ 160.0 MHz	60 mA		

Table 3: Rise & Fall Time max.

6.0 ns:	1.0 ~ 49.9 MHz	<b>note:</b> - specific data on request - rise time: 0.1 V <sub>DC</sub> ~ 0.9 V <sub>DC</sub> - fall time: 0.9 V <sub>DC</sub> ~ 0.1 V <sub>DC</sub>
5.0 ns:	50.0 ~ 79.9 MHz	
4.0 ns:	80.0 ~ 99.9 MHz	
3.0 ns:	100.0 ~ 160.0 MHz	

### Dimensions JCO14 / JCO8

<b>JCO14</b> 	<b>JCO8</b> 		
top view	side view	bottom view	in mm

### Order Information

0	frequency	type	e/d function	frequency stability	supply voltage code	option
Oscillator	1.0 ~ 160.0 MHz	JCO8 JCO14	2 = no 3 = yes/tristate	see table 1	3.3 V = 3.3 Volt	blank = -10 °C ~ +70 °C T1 = -40 °C ~ +85 °C

Example: O 20.0-JCO8-3-A-3.3V-T1 (LF = RoHS compliant / Pb free pins or pads)



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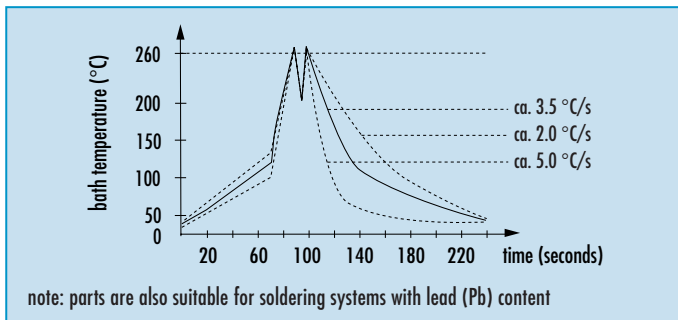
## Enable / Disable Function

pin #1	pin #3
open or high	oscillation
gnd or low	high impedance

## Marking

type  
frequency  
company code / date code

## Wave Soldering Profile



## Preferred Type

JCO8-3-B-3.3  
JCO14-3-B-3.3

## Packaging

JCO8-3-B packed in antistatic plastic tubes, 40 pcs  
JCO14-3-B packed in antistatic plastic tubes, 25 pcs