

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 _{DC} | | 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 _{DC} -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 _{DC} | | 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 | 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: | 50.0 ~ 79.9 MHz | |
| 4.0 ns: | 80.0 ~ 99.9 MHz | |
| 3.0 ns: | 100.0 ~ 160.0 MHz | |
| | | |

Dimensions JCO14 / JCO8

| | | | |
|------------------|-----------------|-------------|-------|
| JCO14 | JCO8 | | |
| 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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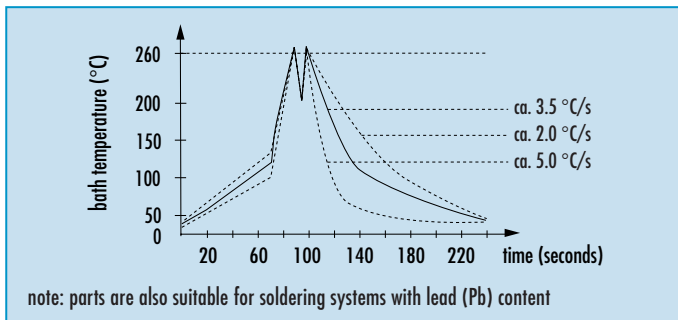
Enable / Disable Function

| 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