

actual size

## JCO series • 5.0 Volt

### TTL oscillator type

#### features

- ultra compact metal package
- for wave soldering

type	JCO8	JCO14
frequency range* <sup>1)</sup>	1.0 MHz ~ 160.0 MHz	
current consumption max.	10 mA	(1.0 MHz ~ 16.9 MHz)
	25 mA	(17.0 MHz ~ 59.9 MHz)
	40 mA	(60.0 MHz ~ 99.9 MHz)
	60 mA	(100.0 MHz ~ 160.0 MHz)
frequency stability* <sup>2)</sup>	± 100 ppm (A-type) / ± 50 ppm (B-type) / ± 25 ppm (C-type)	
	on request: ± 20 ppm (D-type) / ± 15 ppm (E-type) / ± 10 ppm (F-type)	
output load	10 TTL	
rise and fall time	6 ns max.	
operating temperature	-10 °C ~ +70 °C	
storage temperature	-55 °C ~ +125 °C	
supply voltage	+5.0 V ± 10%	
output level "low" max.	0.4 V	
output level "high" min.	2.4 V	
symmetry	60/40 % at 1.4 V	
tristate function	no (option 1) / yes (option 4)	

\*<sup>1)</sup> frequency range from 500 kHz ~ 1.0 MHz on request

\*<sup>2)</sup> frequency stability: inclusive of calibration tolerance at 25 °C, operating temperature range, input voltage change, aging, shock and vibration

#### order information example:

**0 - 66.0 - JCO14 - 1 - A - T1**

1. 2. 3. 4. 5. 6.

- oscillator: 0
- frequency: 66.0 MHz
- type: JCO14 = DIP14 or JCO8 = DIP8
- output logic: 1 = TTL or 4 = TTL tristate
- frequency stability: ± 100 ppm (A-type) / ± 50 ppm (B-type)  
± 25 ppm (C-type) / ± 20 ppm (D-type)  
± 15 ppm (E-type) / ± 10 ppm (F-type)
- special requirement: -40 °C ~ +85 °C (see temperature option table)

#### marking:

- line = type
- line = frequency
- line = company code / date code / internal code

#### temperature options for A and B type only:

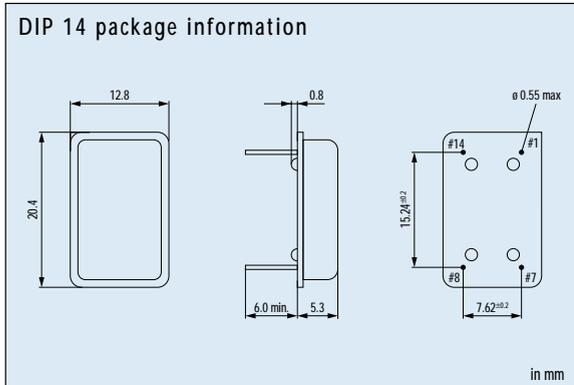
- T1 - -40 °C ~ +85 °C
- T2 - -40 °C ~ +105 °C
- T3 - -40 °C ~ +125 °C
- T4 - -40 °C ~ +90 °C

#### enable / disable function (e/d)

- |                          |  |
|--------------------------|--|
| <b>control input # 1</b> | <b>output # 5 (DIP8) or output # 8 (DIP14)</b> |
| open or high             | active   |
| low or ground            | high impedance                                 |



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## Terminals JCO 14

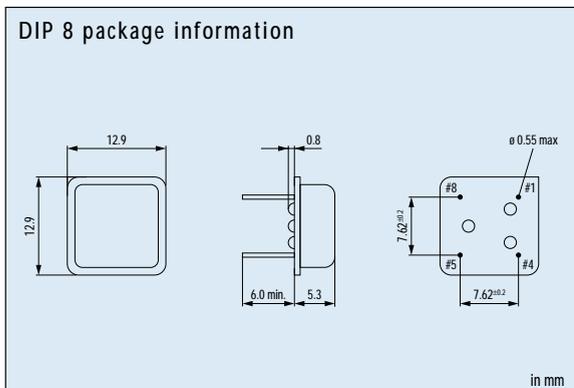
- # 1: not connected or control
- # 7: ground
- # 8: output
- # 14: supply voltage

packed in plastic tubes,  
25 pcs per tube

note:  $\pm 10$  ppm type package height  
8.0 mm

## test conditions:

- a) temperature cycle:  
0 °C to 25 °C to 120 °C to 25 °C  
(each temperature 20 minutes,  
3 cycle)
- b) shock test:  
1000 g, 0.5 ms, 1/2 sine wave,  
each plane
- c) vibration:  
10 Hz ~ 82 Hz, 1.52 mm amplitude  
82 Hz ~ 2000 Hz, 20 g each plane



## Terminals JCO 8

- # 1: not connected or control
- # 4: ground
- # 5: output
- # 8: supply voltage

packed in plastic tubes,  
40 pcs per tube

note:  $\pm 10$  ppm type package height  
8.0 mm

