



actual size

# Oscillator JOD32 · LVDS

- SMD Low Voltage LVDS Oscillator, 3.2 x 2.5 mm
- excellent phase noise (option -IP)
- drives fast LVDS logic
- complementary outout, low EMI
- compact & flat ceramic / metal package



RoHS compliant



Pb free



REACH compliant



Conflict mineral free

GENERAL DATA		JOD32 3.3V & 2.5V (3rd OT)
TYPE	JOD32 3.3V & 2.5V (3rd OT)	
frequency range	65.0 ~ 190.0 MHz	
frequency stability over all*	±25 ppm ~ ±100 ppm (see table 1)	
current consumption	35 mA max.	
supply voltage V <sub>DC</sub>	3.3 V ±5% / 2.5 V ±5%	
temperature	operating	-20 °C ~ +70 °C (T0)
		-40 °C ~ +85 °C (T1)
		-40 °C ~ +105 °C (T2 Δ)
		-40 °C ~ +125 °C (T3 Δ)
	storage	-55 °C ~ +125 °C
output	rise & fall time	0.4 ns (20% ~ 80% of V <sub>pp</sub> )
	load nom.	100 Ω differential
	swing min.	0.33 V <sub>p-p</sub> typ. / 0.25 V <sub>p-p</sub> min.
	offset voltage	1.25 V ± 0.125 V
output enable time max.	10 ms	
output disable time max.	200 ns	
start-up time max.	10 ms	
standby function	stop	
standby current max.	10 μA	
phase jitter 12 kHz ~ 20.0 MHz	< 0.5 ps RMS / < 0.2ps RMS for option -IP	
symmetry at 50% of V <sub>pp</sub>	45% ~ 55% typ. (40% ~ 60% if T3)	

Δ ask for availability of higher temperature ranges and frequency stabilities

## TABLE 1: FREQUENCY STABILITY CODE

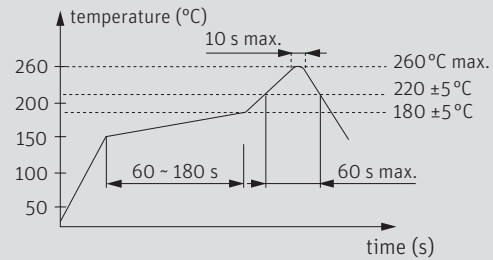
stability code		A	B	G	C
temp. code*		±100 ppm	±50 ppm	±30 ppm	±25 ppm
-20 °C ~ +70 °C	T0	○	○	○	○
-40 °C ~ +85 °C	T1	○	○	○	
-40 °C ~ +105 °C	T2 Δ	○	○		
-40 °C ~ +125 °C	T3 Δ	○	○		

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

## ENABLE / DISABLE FUNCTION

pin #1 (e/d control)	pin #4 / #5 (outputs)
open or ≥ 0.7 V <sub>CC</sub>	enable
gnd or ≤ 0.3 V <sub>CC</sub>	high impedance

## REFLOW SOLDERING PROFILE



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

### DIMENSIONS

top view

side view

bottom view

pad layout

pin connection

# 1: e/d  
# 2: nc  
# 3: ground  
# 4: output 1  
# 5: output 2  
# 6: V<sub>CC</sub>

in mm

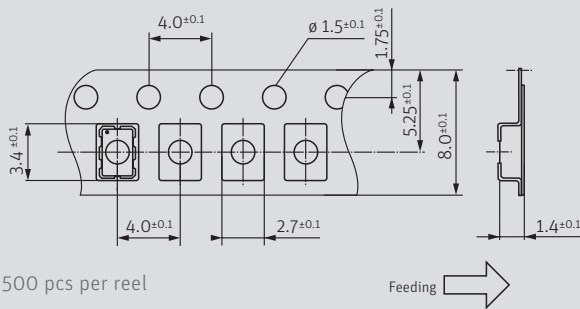
### ORDER INFORMATION

<b>0</b>	frequency	type	frequency stability code	supply voltage code	option	improved phase noise
Oscillator	65.0 ~ 190.0 MHz	JOD32	see table 1	2.5 = 2.5 V 3.3 = 3.3 V	T0 = -20 °C ~ +70 °C T1 = -40 °C ~ +85 °C T2 = -40 °C ~ +105 °C please ask T3 = -40 °C ~ +125 °C please ask	IP = improved phase noise

**Example: 0 156.250-JOD32-B-3.3-T1-IP-LF** (Suffix LF = RoHS compliant / Pb free)

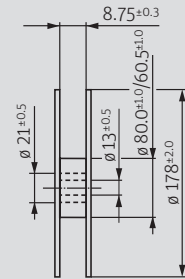
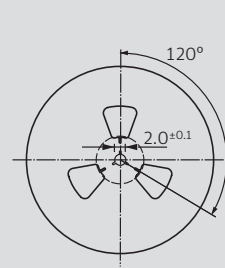
# Oscillator JOD32 · LVDS

## TAPING SPECIFICATION



500 pcs per reel

Feeding →



in mm

## PACKAGING NOTE

- standard packing unit is 500 pieces per reel
- non-multiple packing units are only supplied taped / bulk

## MARKING

**company code / frequency**

□ **DF / internal code / date code**

date code: A ~ M: Jan. - Dec.

1: 2021    2: 2022    3: 2023    4: 2024    5: 2025    6: 2026

Jan.	Febr.	Mar.	Apr.	May	June
A	B	C	D	E	F
July	Aug.	Sept.	Oct.	Nov.	Dec.
G	H	J	K	L	M