



actual size

Oscillator · LVDS · VCXO

SMD LVDS VCXO · 7.5 x 5.0 mm

- uses quartz crystal at fundamental mode and PLL
- high pulling range ± 150 ppm
- complementary LVDS output, low EMI
- ceramic/metal package



General Data

type	JVD75B	
frequency range	12.0 ~ 800.0 MHz	
frequency stability over all*	± 25 ppm / ± 50 ppm (see table 1)	
frequency pulling range min.	± 150 ppm	
pulling control voltage	1.65 V \pm 1.5 V [■]	
pulling control input imp. min.	60 k Ω	
current consumption	80mA max.	
supply voltage V _{DC}	3.3 V \pm 5%	
temperature	operating	-10 °C ~ +70 °C / -40 °C ~ +85 °C
	storage	-40 °C ~ +85 °C
output	rise & fall time	1.0ns (20% ~ 80% of V _{pp})
	load nom.	100 Ω differential
	swing min.	0.35V _{p-p}
	offset voltage	1.25 V \pm 0.125V
standby function	yes	
output enable time max.	10ms	
output disable time max.	150ns	
start-up time max.	10ms	
phase jitter 12 kHz ~ 20.0 MHz	< 5.0ps RMS	
symmetry at 50% of V _{pp}	45% ~ 55% typ. (40% \pm 60% max.)	

Table 1: Frequency Stability Code

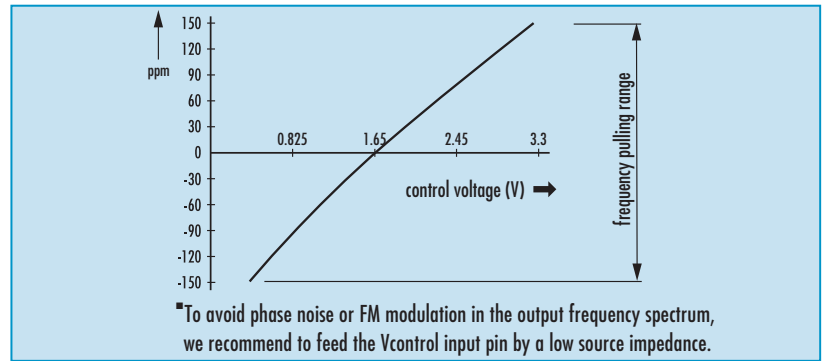
stability code	B	C			
	± 50 ppm	± 25 ppm			
-10 °C ~ +70 °C	○	○			
-40 °C ~ +85 °C	○				
● standard ○ available					

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

Enable / Disable Function

pin #2 (e/d control)	pin #4 / #5 (outputs)	
open or ≥ 2.4 V	active	
gnd or ≤ 0.4 V	high impedance	

Control Voltage Characteristic



Dimensions

top view

side view

bottom view

pad layout

pin connection

- # 1: V_{control}
- # 2: e/d
- # 3: ground
- # 4: output 1
- # 5: output 2
- # 6: V_{CC}

in mm

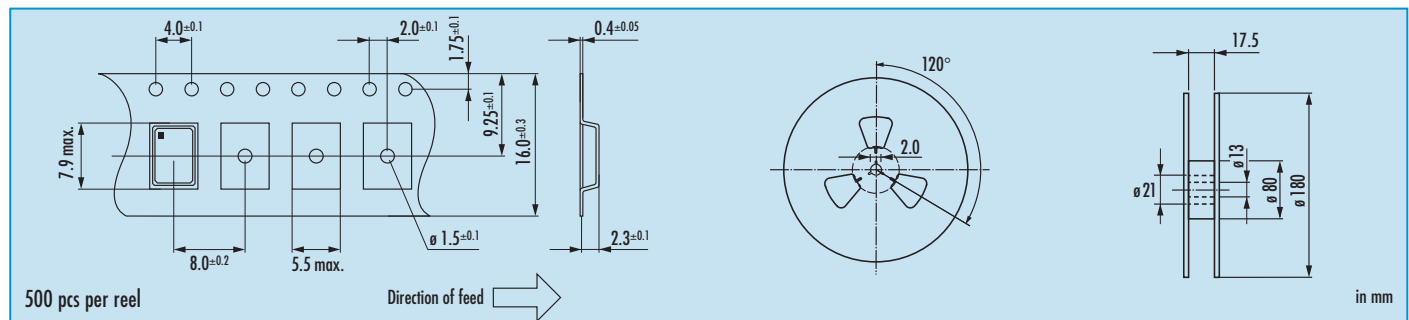
Order Information

0	frequency	type	stability at 25 °C in ppm	supply voltage	pulling range in ppm	option
Oscillator	12.0 ~ 800.0 MHz	JVD75B	B = ± 50 ppm C = ± 25 ppm	3.3 = 3.3 V	15 = ± 150 ppm	blank = -10 °C ~ +70 °C T1 = -40 °C ~ +85 °C

Example: O 155.520-JVD75B-B-3.3-15-T1 (Suffix LF = RoHS compliant / Pb free pins or pads)

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Taping Specification



Packing Note

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

Marking

type / frequency / date code

date code:
 A ~ M: Jan.- Dec.
 9: 2009
 0: 2010
 1: 2011

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

Reflow Soldering Profile

