actual size

Oscillator · LVDS · VCXO

SMD LVDS VCXO · 7.5 x 5.0 mm

- uses quartz crystal in MESA technology
- low phase noise + jitter
- complementary LVDS output, low EMI
- ceramic/metal package

RoHS 2002/95/EC compliant

Pb free: pins / pads

General Data

type		JVD75A
frequency range		50.0 ~ 700.0 MHz
frequency stability over all*		± 25ppm / ± 50ppm (see table 1)
frequency pulling range min.		± 80ppm
pulling control voltage		1.65 V ± 1.5 V▪
pulling control input imped. min.		60 kΩ
current consumption		80mA max.
supply voltage V_{DC}		3.3 V ± 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 Vpp)
	load nom.	100Ω differential
	swing min.	0.35Vp-p
	offset voltage	1.25 V ± 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		< 1.0ps RMS
symmetry at 50% of Vpp		45% ~ 55% typ. (40% ± 60% max.)

Table 1: Frequency Stability Code

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

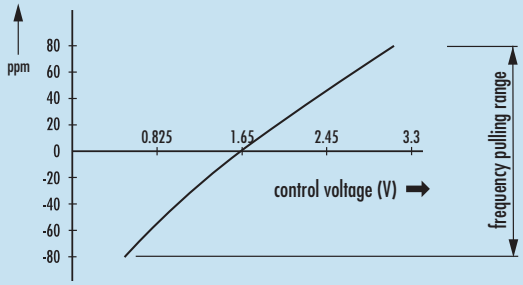
● standard ○ available

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

Enable / Disable Function

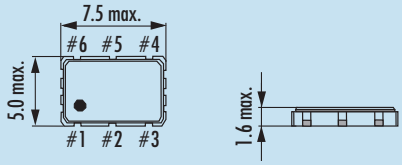
pin #2 (e/d control)	pin #4 / #5 (outputs)	
open or ≥ 2.4 V	active	
gnd or ≤ 0.4 V	high impedance	

Control Voltage Characteristic

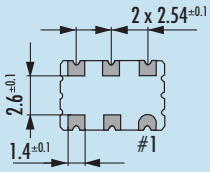


▪To avoid phase noise or FM modulation in the output frequency spectrum, we recommend to feed the Vcontrol input pin by a low source impedance.

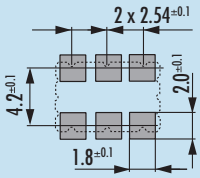
Dimensions



top view side view



bottom view



pad layout

pin connection
1: Vcontrol
2: e/d
3: ground
4: output 1
5: output 2
6: Vcc

in mm

Order Information

0	frequency	type	stability at 25 °C in ppm	supply voltage	pulling range in ppm	option
Oscillator	50.0 ~ 700.0 MHz	JVD75A	B = ± 50 ppm C = ± 25 ppm	3.3 = 3.3 V	08 = ± 80 ppm	blank = -10 °C ~ +70 °C T1 = -40 °C ~ +85 °C

Example: O 155.520-JVD75A-B-3.3-08 (Suffix LF = RoHS compliant / Pb free pins or pads)