



actual size

# Oscillator · PECL · VCXO

SMD PECL VCXO · 7.5 x 5.2 mm

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



## General Data

type		JVE75A
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 <sup>■</sup>
pulling control input imped. min.		60 kΩ
current consumption		120mA max.
supply voltage V <sub>DC</sub>		3.3 V ± 5%
temperature	operating	-10 °C ~ +70 °C / -40 °C ~ +85 °C
	storage	-40 °C ~ +85 °C
output	rise & fall time	0.5ns (20% ~ 80% of V <sub>pp</sub> )
	load nom.	50Ω at 1.3 V
	low level max.	1.7 V
	high level min.	2.2 V
standby function		yes
output enable time max.		10ms
output disable time max.		50ns
start-up time max.		10ms
phase jitter 12 kHz ~ 20.0 MHz		< 1.0ps RMS
symmetry at 50% of V <sub>pp</sub>		45% ~ 55% typ. (40% ± 60% max.)

Table 1: Frequency Stability Code

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

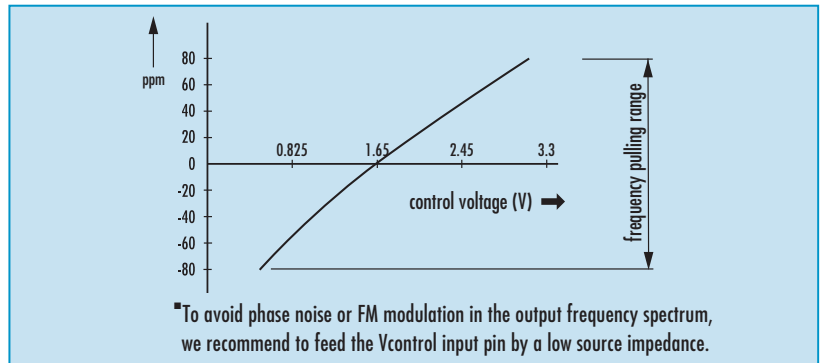
● standard ○ available

\* 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

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

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	JVE75A	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-JVE75A-B-3.3-08 (Suffix LF = RoHS compliant / Pb free pins or pads)