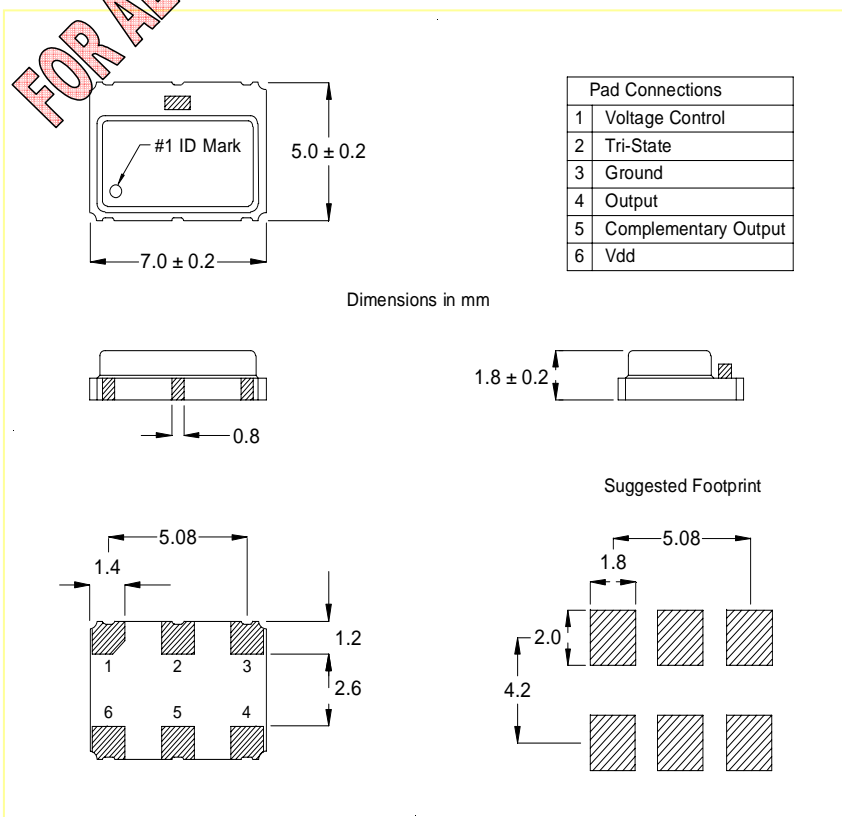# ACT9CSV- 6 LVPECL/LVDS

Compatible with Eu Directive
2002/EC - RoHS

The ACT9CSV-6 is a family of 6-pad miniature surface mount Voltage Controlled Crystal Oscillators (VCXO) housed in a 7 x 5 mm ceramic package with a metal lid. Only 1.8mm high they are ideal for high density automatic assembly printed circuit boards. These devices can be pulled between ±50ppm & ±150ppm, from the nominal frequency, by varying the voltage on pad 1. Applications include Networking, Telecomms, PLL Circuits, Set Top Box, Audio Visual and many other Consumer Applications
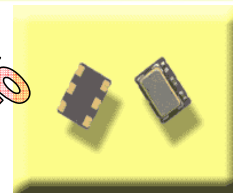
Specification

Parameter	Symbol	Specification	Options
Frequency Range	fo	25.00 ~ 650.00 MHz	Please specify
Temp Operating Range	Topr	0 ~ +70°C & -40 ~ +85°C	Please specify
Storage Temp Range	Tstg	-55 to 125°C	
Frequency Stability	Δf/fo	±20ppm ~ ±100ppm	Please specify
Supply Voltage	Vdd	3.3V$_{DC}$ ±5%	
Supply Current (max)	Iop	85mA - 25.0 ~ 160.0 MHz LVPECL	
		95mA - 161.0 ~ 300.0 MHz LVPECL	
		100mA - 301.0 ~ 650 MHz LVPECL	
		45mA - 25.0 ~ 100.0 MHz LVDS	
		70mA - 101.0 ~ 650.0 MHz LVDS	
Duty Cycle	Tw/t	40/60% Vdd -1.3V$_{DC}$, LVPECL), (Vcc -1.25V$_{DC}$, LVDS)	Please specify
Rise & Fall Time	Tr/Tf	0.6nS max @ 20 / 80%	
Output Load		50Ω into Vdd -2.0V$_{DC}$ (LVPECL), 100Ω differential load (LVDS)	
Output Voltage	VOL	Vdd -1.620V$_{DC}$ max (LVPECL), 1.1925V$_{DC}$ max (LVDS)	
	VOH	Vdd -1.025V$_{DC}$ max (LVPECL), 2.1750V$_{DC}$ min (LVDS)	
Voltage Control	Vc	1.65V$_{DC}$ ± 1.65V	
Pulling Range	Δfc	±50ppm ~ ±150ppm	
Jitter		70ps RMS max	
Aging	Fa	±3ppm / year max	

Pad Connections	
1	Voltage Control
2	Tri-State
3	Ground
4	Output
5	Complementary Output
6	Vdd

5.0 ± 0.2
7.0 ± 0.2
#1 ID Mark

Dimensions in mm

1.8 ± 0.2
0.8

Suggested Footprint

5.08
1.4
1.2
2.6

5.08
1.8
2.0
4.2

Please note that all parameters can not necessarily be specified in the same device
Customer to specify : Frequency, Frequency Stability, Operating Temperature Range, Symmetry, Output type & Minimum Pulling Range
In line with our ongoing policy of product evolvement and improvement, the above specification may be subject to change without notice
ISO9001:2000 Registered
For quotations or further information please contact us at:
3 The Business Centre, Molly Millars Lane, Wokingham, Berkshire, RG41 2EY, UK
http://www.actcrystals.com

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