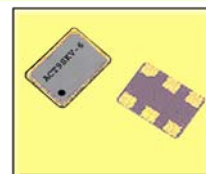


ACT9SKV-6 LVPECL or LVDS Voltage Controlled Oscillator

The ACT 9SKV-6 is a 6-pad miniature surface mount Voltage Controlled Crystal Oscillators (VCXO) housed in a 7 x 5 mm ceramic package with a metal lid. Only 1.7mm high it is ideal for high density, automatic assembly, printed circuit boards. The device may be "pulled" by ± 80 ppm 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

Compatible with Eu Directive
2002/EC - RoHS



Specification

Parameter	Symbol	Specification	Condition
Frequency	fo	19.00 ~77.760MHz (Fund 2.5 and 3.3V Vdd) 77.760~300MHz (Multiplier 3.3V Vdd only)	Please Specify
Temp Operating Range	Topr	Please refer to Table 1	Please Specify
Storage Temp Range	Tstg	-55 to 105°C	
Frequency Stability	$\Delta f/fo$	Please refer to Table 1	Please Specify
Supply Voltage	Vdd	3.3Vdc $\pm 5\%$ 19~300MHz	2.5VDC 19-77.76MHz
Control Voltage	Vcntrl	1.65VDC $\pm 1.35V$ or 1.65V	1.25VDC $\pm 1.05V$ or 1.25V
Output Logic	Iop	LCPECL	LVDS
Supply Current (max)	Iop	80mA	55mA
Load drive capability		50 Ohms to Vdd -2V0dc	LVPECL
		100 Ohms differential load	LVDS
Duty Cycle	Tw/t	45/55%	@ 50% of waveform
Rise & Fall Time	Tr/Tf	0.6nS max	20%~80% of waveform
Output Voltage Logic	VOL	Vcc - 1.620V (LVPECL) 1.1925V (LVDS)	
	VOH	Vcc - 1.025V (LVPECL) 2.175V (LVDS)	
Linearity		3% typical 4% max Positive slope	
Pulling Range	Δfc	± 25 ~100ppm	Min
Phase noise		- 40dBc @ 10Hz	-125dBc @ 10kHz
		- 70dBc @ 100Hz	-122dBc @ 100kHz
		-100dBc @ 1kHz	-120dBc @ 1MHz
Phase Jitter		3.0ps Max. (19.0-77.760MHz) 4.0ps Max (77.760-300MHz)	12kHz-20MHz
Aging	Fa	± 3 ppm /year Max ± 20 ppm 10 years Max	

Table 1

	+/-20ppm	+/-25ppm	+/-30ppm	+/-50ppm	+/-100ppm
0~+50°C	+	+	+	+	+
-10~+60°C	+	+	+	+	+
-10~+70°C	+	+	+	+	+
-20~+70°C		+	+	+	+
-30~+60°C		+	+	+	+
-30~+70°C		+	+	+	+
-30~+75°C		+	+	+	+
-30~+80°C		+	+	+	+
-30~+85°C		+	+	+	+
-40~+80°C		+	+	+	+
-40~+85°C		+	+	+	+

Please note that all parameters can not necessarily be specified in the same device

Customer to Specify : Frequency, Frequency Stability, Supply Voltage, Operating Temperature Range, LVPECL or LVDS, Pulling range, Control voltage

ISO9001:2000 Registered

For quotations or further information please contact us at:

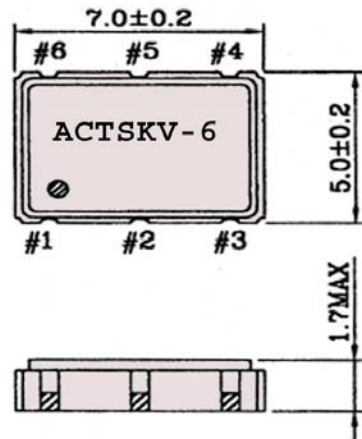
3 The Business Centre, Molly Millars Lane, Wokingham, Berkshire, RG41 2EY, UK
<http://www.actcrystals.com>

Issue: 4 SKr
Date: 2/11/05

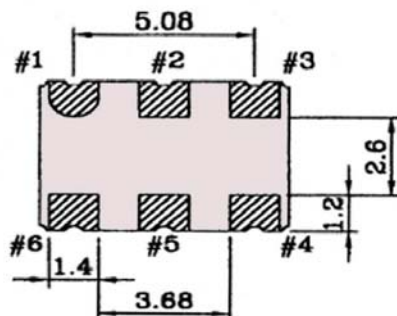
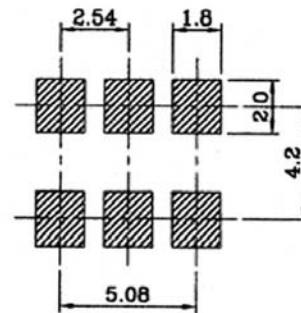
ACT 9SKV-6 LVPECL or LVDS Voltage Control Oscillator

Outline Dimensions (mm)

Pad Surface Finish Au
OVER Ni



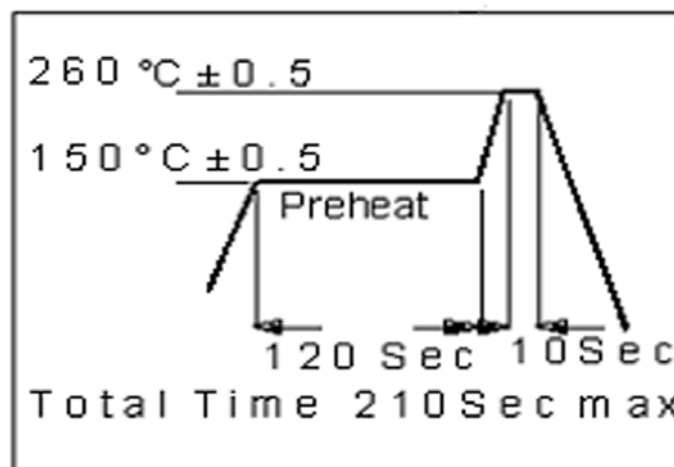
Recommended Footprint



CONNECTION

- #1 V.C
- #2 Tri-State
- #3 GND
- #4 OUTPUT 1
- #5 OUTPUT 2
- #6 Vdd

Maximum Re-flow Profile



ISO9001:2000 Registered

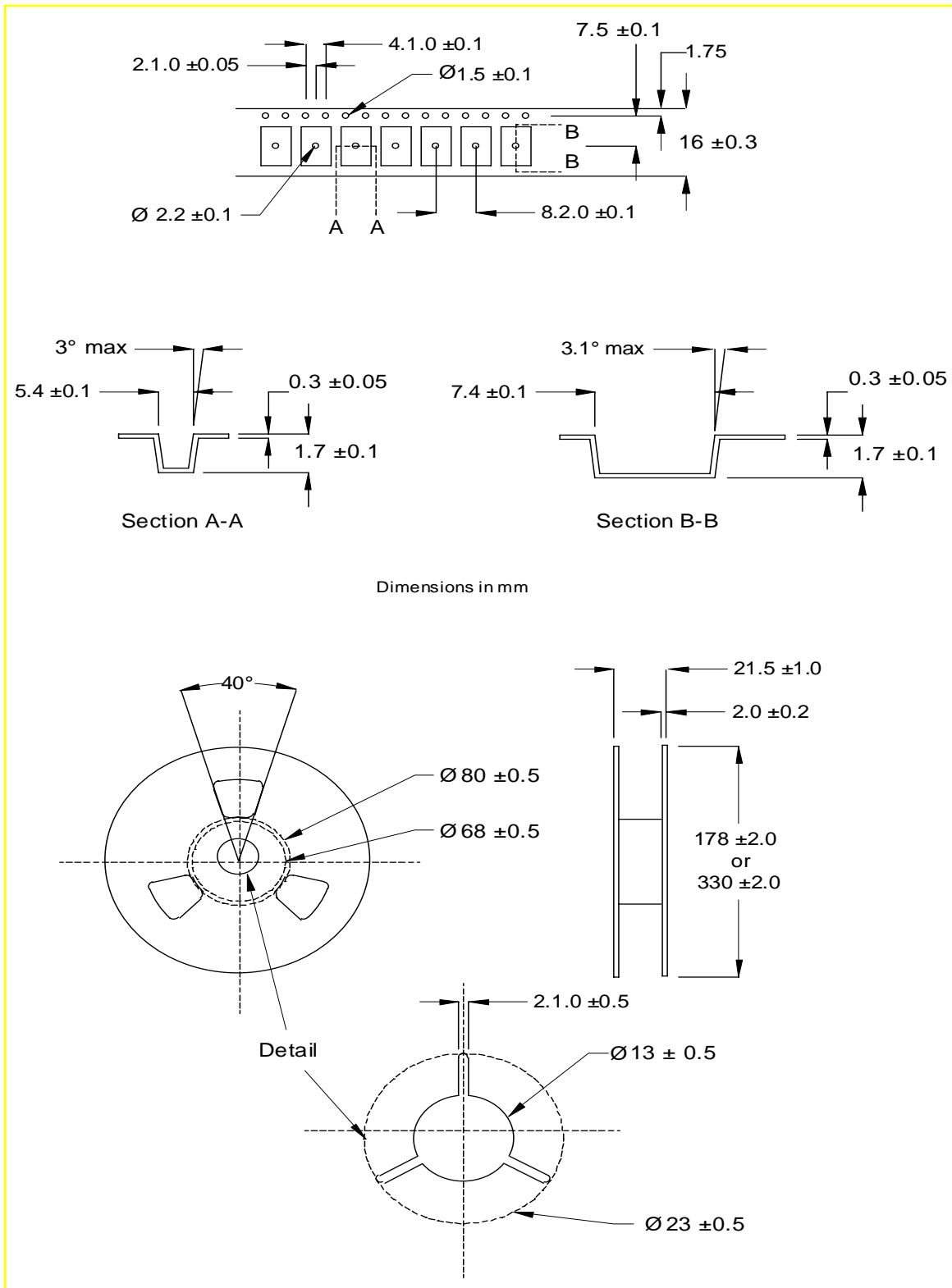
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Tape and Reel information (1000 pieces per reel)



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