

## ACT7CSV-6

The ACT7CSV-6 is a family of 6-pad miniature SMD Voltage Controlled Crystal Oscillators (VCXO) housed in a 7 x 5 mm ceramic package with a metal lid. Only 1.5mm high they are ideal for high density automatic assembly printed circuit boards. These devices can be pulled  $\pm 100$ ppm from the nominal frequency by varying the voltage on pin 1. Applications include PLL circuits, Cellular (PCS) Telephony, Set Top Box, MP3 Player, Audio/Video, Video Game Console, HDTV, SATCOM, GPS Receivers and & many more..



### Specification

Parameter	Symbol	Specification		Condition
Frequency Range	$f_0$	1.5 ~ 200MHz		Please specify
Output		TTL	CMOS	Please specify
Supply Voltage	Vdd	5Vdc $\pm$ 10%	3.3Vdc $\pm$ 10%	Please specify
Output Load	N/CL	10TTL	15pF*	*30pF available enquire
Output Level '0'	$V_{OL}$	0.4V	0.5V	0.33Vdc
Output Level '1'	$V_{OH}$	2.4V	4.5V	2.97Vdc
Control Voltage	$V_{CNT}$	0.5 ~ 4.5Vdc		0.3 ~ 3.0Vdc
Linearity/Slope		$\pm$ 10% Positive Monotonic		
Input Impedance	$R_{CNT}$	80K $\Omega$ typical		
Pulling	$\Delta f/V_{CNT}$	$\pm$ 100ppm minimum or specify		Please specify
Enable Voltage High	$V_{IH}$	5.5Vdc	2.97Vdc	
Enable voltage Low	$V_{IL}$	4.5Vdc	0.33Vdc	
Standby Current	$I_{ST}$	5mA max		Output Enable Low
Output Disable time	$T_{DIS}$	5ns max		
Output Enable Time	$T_{EN}$	5ns max		
Frequency Stability	$\Delta f/f_0$	$\pm$ 25ppm, $\pm$ 50ppm, $\pm$ 100ppm		Please specify
Operating Temperature Range	$T_{OP}$	-10 ~ +70°C, -40 ~ +85°C		Please specify
Storage Temperature Range	$T_{STG}$	-55 ~ +125°C		
Duty Cycle	$T_w/t$	40/60%		
Rise and Fall Time	$T_r/T_f$	5.0ns max		0.1 x Vdd to 0.9 x Vdd
Start-up Time	$T_{OSC}$	10ms max		
Supply Current	$I_{OP}$	$f_0 < 30$ MHz 30mA max $f_0 > 30$ MHz 45mA max		
Aging	$\Delta f/f_0$	$\pm$ 3ppm/year max		
Phase Jitter		10ps max		12kHz - 20MHz
Re-flow condition		260°C 10s max		

Standard Frequencies (MHz)

1.543	10.575	19.2	24.704	34.368	40.96	77.76
4.095	16.384	19.44	27.0	35.328	44.736	
6.175	17.664	20.48	32.768	38.88	51.84	

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

Customer to specify: Frequency, Output, Vdd, Load, Pulling, Stability, Operating Temperature

In line with our ongoing policy of product evolution the above specification may be subject to change without notice.

**ISO9001:2000 Registered**

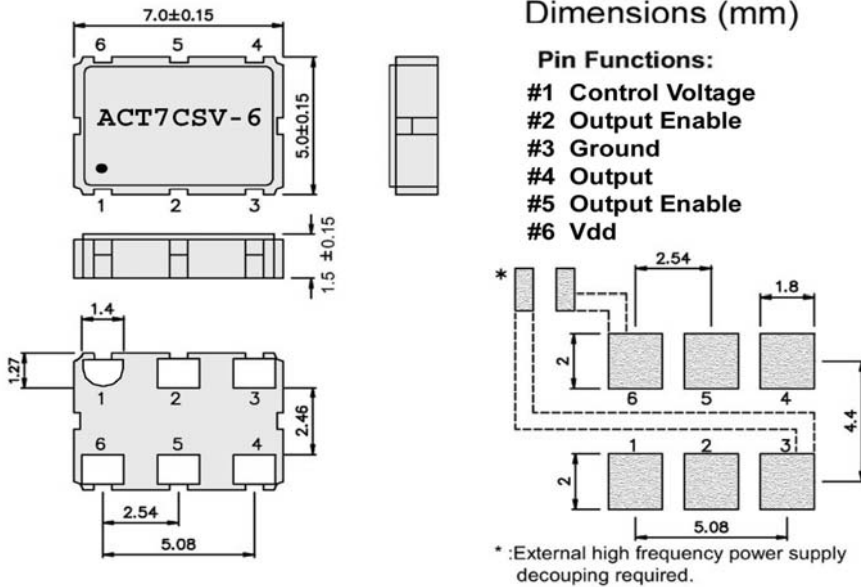
For quotations or further information please contact us at:

3 The Business Centre: Molly Millars Lane, Wokingham, Berkshire, RG41 2EY, UK

<http://www.actcrystals.com>

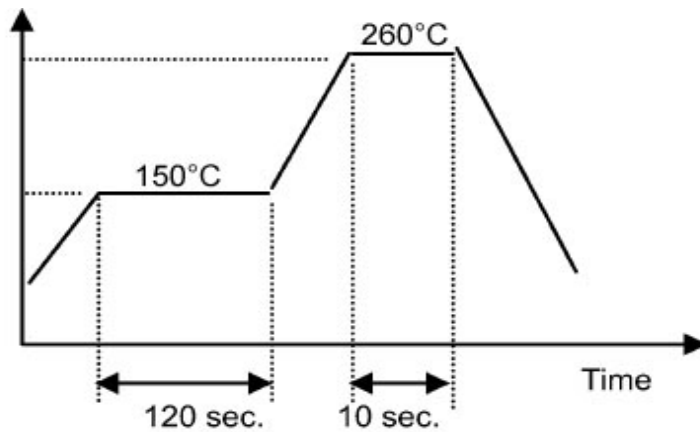
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**ACT7CSV-6**



Lead Free - RoHS comp.	Pad surface material Au
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**Reflow Conditions**



Total time : 200 sec. Max.

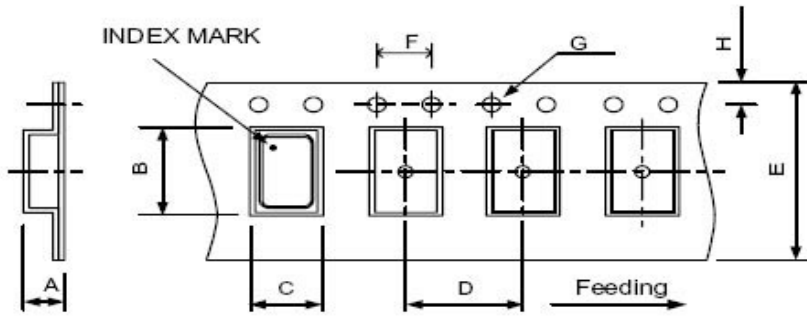
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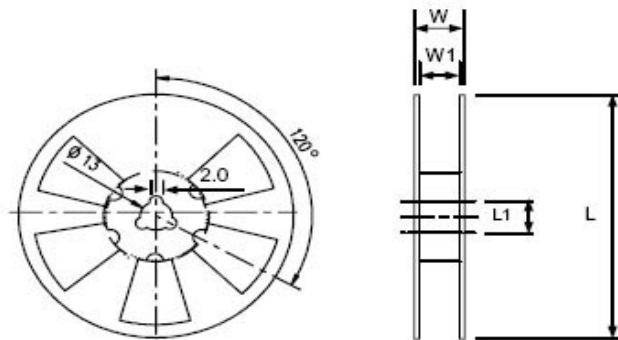
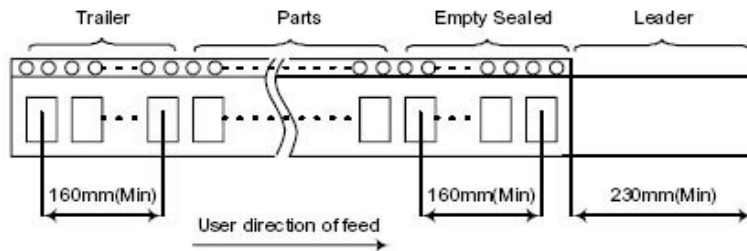
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DIMENSIONS	A	B	C	D	E	F	G	H	(UNIT : mm)
	2.00	7.90	5.45	8.00	16.00	4.00	1.50	1.75	

REMARK :



DIMENSIONS	L	L1	W	W1	pcs / Reel (UNIT : mm)
	180	13	20.5	16	Standard Reel Quantity is 1,000 pcs per reel

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