

ACT9PSV-4/6

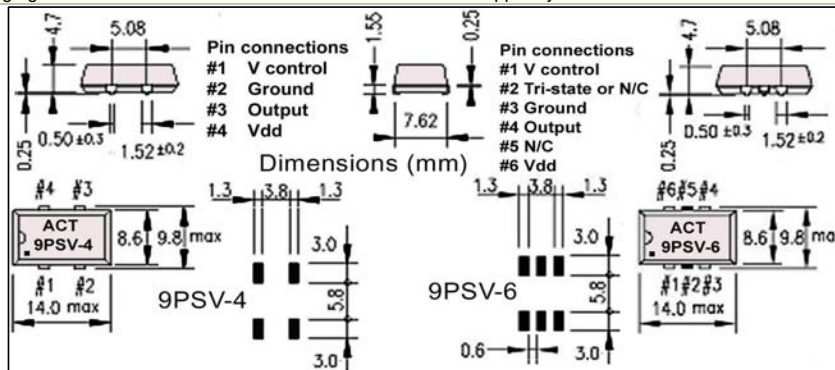
The ACT9PSV-4/6 is a family of 4 & 6 pad miniature surface mount Voltage Controlled Crystal Oscillators (VCXO) housed in a 14 x 9.8 mm plastic package. Only 4.7mm high it is ideal for high density automatic assembly printed circuit boards. These devices can be tuned between $\pm 50\text{ppm}$ & $\pm 200\text{ppm}$ from the nominal frequency by varying the voltage on pin 1.

Applications include Networking, Telecomms, PLL circuits, Set Top Boxes, Audio/Video, Video Game Consoles and many more.....



Specification

Parameter	Symbol	Specification		Condition
Supply Voltage	VDD	3.3Vdc $\pm 5\%$	5.0Vdc $\pm 5\%$ max	Please specify
Frequency Range	fo	1.5 ~ 180.0 MHz	1.5 ~ 52.0 MHz	
Frequency Stability	$\Delta f/fo$	$\pm 25\text{ppm} \sim 100\text{ppm}$ (table 1)		Please specify
Temp Operating Range	Topr	0 to +70°C, -20 to +70°C & -40 ~ +85°C		Please specify
Storage Temp Range	Tstg	-55 to 125°C		
Supply Current	Iop	60mA max		
Duty Cycle	Tw/t	40/60% (std) & 45/55%		Please specify
Rise & Fall Time	Tr/Tf	1.5 ~ 35.0 MHz	6nS max	
		36.0 ~ 70.0 MHz	5nS max	
		70.0 ~ 180 MHz	4nS max	
Output Logic		TTL / HCMOS		
Output Load	N/CL	10TTL / 15pF HCMOS		
Output Voltage	VOL	0.4Vdc min (TTL), 10% VDD min (HCMOS)		
	VOH	2.4Vdc min (TTL), 90% VDD min (HCMOS)		
Voltage Control	Vc	1.65Vdc $\pm 1.65\text{V}$	2.5Vdc $\pm 2.0\text{V}$	
Slope		Positive		
Linearity		10% standard 5% option		Please specify
Pulling Range	Δfc	$\pm 50 \sim \pm 200\text{ppm}$	$\pm 50\text{ppm} \sim \pm 130\text{ppm}$	
Start Up Time	Tosc	10mS max		
Aging	Fa	$\pm 5\text{ppm} / \text{year max @} 25^\circ\text{C}$		



Pad surface material Ag
10-30um

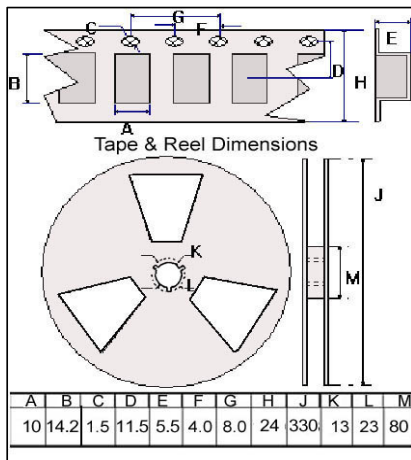
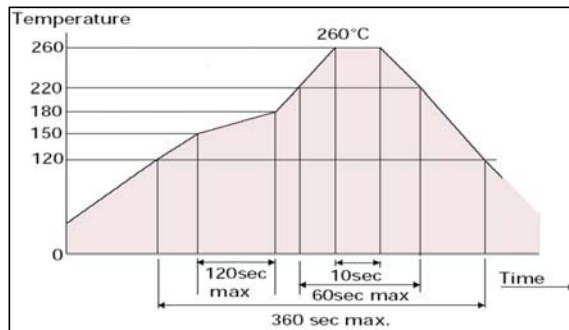


Table 1: Available stabilities

	$\pm 20\text{ppm}$	$\pm 25\text{ppm}$	$\pm 30\text{ppm}$	$\pm 50\text{ppm}$	$\pm 100\text{ppm}$
-10 ~ +70°C	✓	✓	✓	Std	Std
-20 ~ +70°C	✓	✓	✓	✓	Std
-40 ~ +85°C	✓	✓	✓	✓	Std



Standard reel quantity 1K pieces

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

Customer to specify : Frequency, Frequency Tolerance, Operating Temperature Range, Supply Voltage, Pulling Range, linearity & Symmetry

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

ISO9001:2000 Registered

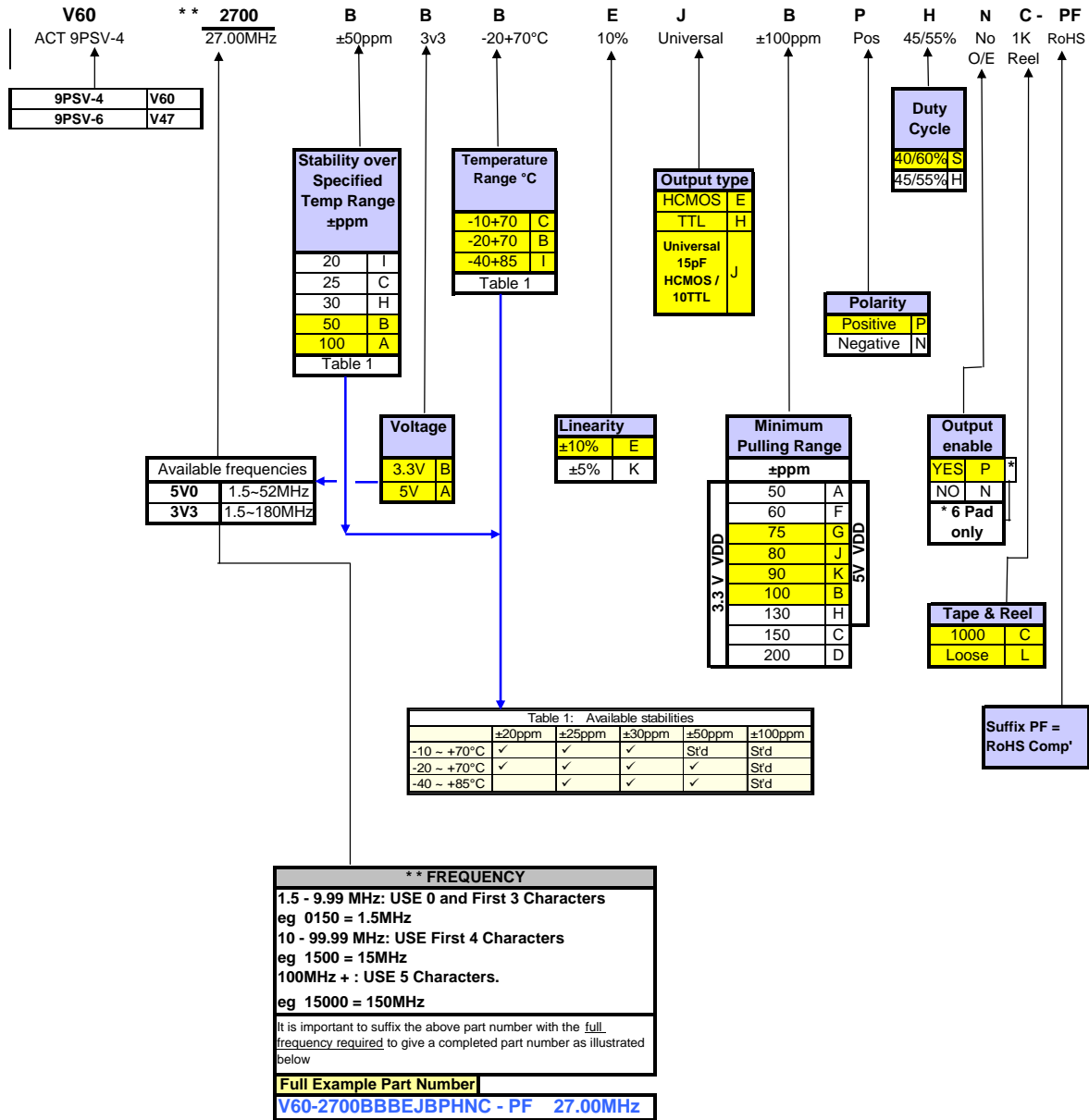
For quotations or further information please contact us at:

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

<http://www.actcrystals.com>

ACT SMD VOLTAGE CONTROLLED OSCILLATORS - PART NUMBERING

Standard (Popular) Specifications Highlighted - Others available



- 1) Tighter Stabilities, Duty Cycles, Supply Voltages, Output Loads and other Operating Temperature Ranges may be available. As each of these specification parameters may impact on each other, it is not always possible to combine all options in one device. Therefore, if a specification not catered for above is required, please contact us directly for assistance.
- 2) ACT are always happy to consider truly custom specification parts which may require non-standard specification parameters, specific testing, customer requested AQL requirements, non standard packaging or taping and reeling and custom marking. (MOQ DEPENDENT) Such devices would normally be allocated a custom specification
 (An ACT 9PSV-4 device may have a part number such as : V60-2700C -C1501-PF)

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