Hosonic

RoHS Compliant
Pb Free

• D7SV Series   7.0*5.0 VCXO

FEATURES

- Industry Standard with 7.0*5.0*1.8mm package
- TTL/HCMOS output compatible
- Tri-State Enable/Disable
- Tight tolerance performance with voltage IC control
- Designed primarily for use in phase lockded loops, phase shift keying and other telecommunication applications such as ADSL, set-top box, and base stations etc.

Electrical Specifications

Parameter		Condition	D7SV	
Frequency Range*	F0		1.75~54MHz	50~200MHz
Frequency Calibration		At 25℃	$\pm$15ppm	
Temperature Stability		Over T$_{OPR}$	$\pm$15ppm, $\pm$25ppm, $\pm$50ppm	
Stability vs. power change		V$_{DD}$+/-5%	$\pm$5ppm	
Stability vs. load change		15pF+/-10%	$\pm$3ppm	
Pullability		Over Control Voltage Range	$\pm$100ppm, $\pm$200ppm	
Control Voltage Range			0~3.3V	
Operating Temperature Range	T$_{OPR}$		-20℃~+70℃(-40℃~+85℃ option)	
Storage Temperature Range	T$_{STG}$		-55℃~+125℃	
Power Supply Voltage	V$_{DD}$		3.3V$\pm$5%	
Aging (First Year)		25℃$\pm$3℃	$\pm$5ppm	
Supply Current	I$_{DD}$		30mA Max	40mA Max
Output Symmetry	Sym	At 1/2V$_{DD}$	40/60%(45/55% Option)	
Rise time	T$_r$	20%V$_{DD}$~80%V$_{DD}$	10nS Max	1nS Max
Fall Time	T$_f$	80%V$_{DD}$~20%V$_{DD}$	10nS Max	1nS Max
Output Voltage	V$_{OH}$		90% V$_{DD}$ min	
	V$_{OL}$		10% V$_{DD}$ max	
Output Load			15pF Max	
Start-up Time	Ts		10mS Max	
Pin 2,tri-state function			Pin 2=H or open....Output active at pin 4	
			Pin 2=L.....high impedance at pin 4	
Packing Unit			1000pcs/reel	

Mechanical Dimensions(mm)

Top View
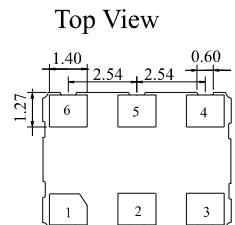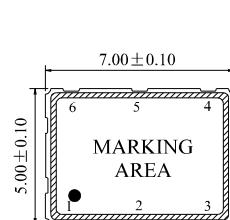
Recommended Solder Pattern

Pin	Connection
#1	Vcontrol
#2	Tri-state
#3	GND
#4	Output
#5	N.C.
#6	V$_{DD}$
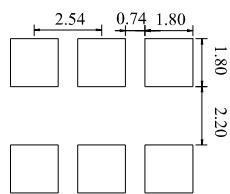
Test Circuit
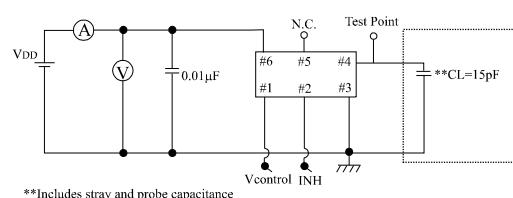
**Includes stray and probe capacitance

Output Waveform

$$T0=1/F0 \qquad Symmetry=\frac{T1}{T0}\times100\%$$
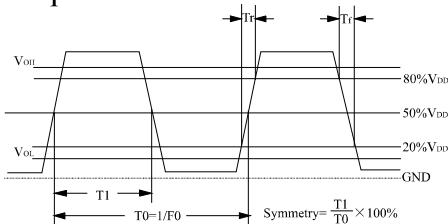
***note: A 0.01uF bypass capacitor should be placed between V$_{DD}$(Pin6) and GND(Pin3) to Minimize power supply line noise