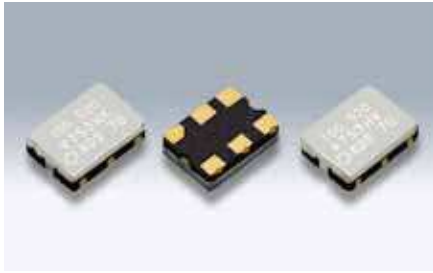


SMD Voltage Controlled Crystal Oscillators

DSV753H SERIES



Actual size

■ Features

- Available with three types of output functions: CMOS, LV-PECL, and LVDS
- Differential output (LV-PECL, LVDS)
- Low jitter
- 3-state function

■ Applications

- Optical transmission device, radio transmitter-receiver equipment, digital image devices, and HDTV related equipment.

■ Standard Specification

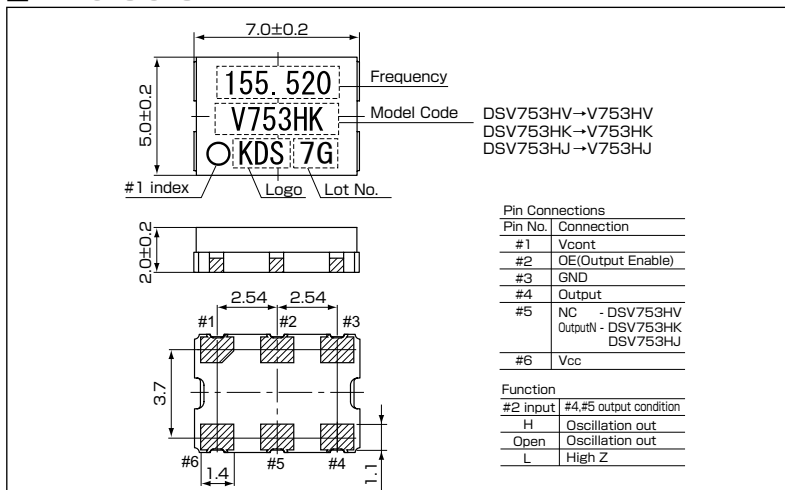
Item	Type	Legend	DSV753HV	DSV753HK	DSV753HJ
Output Specification	—		CMOS	LV-PECL	LVDS
Output Frequency Range	f _o		170~230MHz	170~350MHz	
Supply Voltage	V _{cc}		+3.3±0.165V		
Frequency Control Voltage	V _{cont}		+1.65±1.65V		
Storage Temperature Range	T _{stg}		-40~+85°C		
Operating Temperature Range	T _{use}		-20~+70°C		
Frequency Tolerance (includes frequency tolerance at room temperature.)	f _{tol}		±50×10 ⁻⁶ max.		
Frequency Adjustment Range	f _{cont}		±100×10 ⁻⁶ min. Positive Slope		
Current Consumption	I _{cc}		70mA max.	80mA max.	60mA max.
Stand-by Current (#2 pin "L" level)	I _{std}		30μA max.		
Output Load	Load		15pF max.	50Ω to V _{cc} -2V	100Ω(Output-OutputN)
Symmetry	SYM		45~55%[50% V _{cc} Level]	45~55%[at outputs cross point]	
0 Level Output Voltage	V _{oL}		V _{cc} ×0.1 max.	V _{cc} -1.81~V _{cc} -1.62V	—
1 Level Output Voltage	V _{oH}		V _{cc} ×0.9 min.	V _{cc} -1.025~V _{cc} -0.88V	—
Rise and Fall Time	tr, tf		2.0ns max.[10~90% V _{cc} Level]	1.0ns max.[20~80% Output,OutputN]	1.0ns max.[20~80% Output-OutputN]
Differential Output Voltage	V _{OD1} , V _{OD2}		—	—	0.247~0.454V
Change to V _{od}	ΔV _{od}		—	—	50mV[ΔV _{od} = V _{OD1} -V _{OD2}]
Offset Voltage	V _{os}		—	—	1.125~1.375V
Offset to V _{os}	ΔV _{os}		—	—	50mV
OE Pin 0 Level Input Voltage	V _{IL}		V _{cc} ×0.3 max.		
OE Pin 1 Level Input Voltage	V _{IH}		V _{cc} ×0.7 min.		
Period Jitter (1)	t _{RMS}		2.2ps typ. [σ]	2.5ps typ. [σ]	
	tp-p		20ps typ. [Peak to peak]	22ps typ. [Peak to peak]	
Total Jitter (1)	t _{TL}		32ps typ. [t _{DJ} +n*t _{RJ} n=14.1(BER=1*10 ⁻¹²) (2)]	35ps typ. [t _{DJ} +n*t _{RJ} n=14.1(BER=1*10 ⁻¹²) (2)]	
Phase Jitter	tpj		1 ps max. (fo offset: 12kHz~20MHz)		
Packing Unit			100pcs. / reel or 500pcs. / reel(φ180)		

(1) Measured WAVECREST DTS-2075

Consult our sales representative for other specifications.

(2) t_{DJ}:Deterministic jitter t_{RJ}:Random jitter

■ Dimensions



■ Recommended Land Pattern [mm]

