

SMD Crystal Oscillators

DS0753H SERIES



Actual size

■ Features

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

■ Applications

- Optical transmission device, radio transmitter-receiver equipment

■ Standard Specification

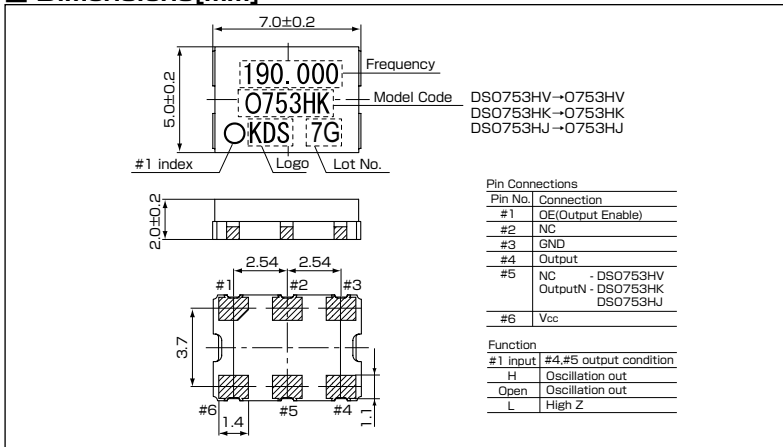
Item	Type	Legend	DS0753HV	DS0753HK	DS0753HJ
Output Specification	—		CMOS	LV-PECL	LVDS
Output Frequency Range	f _o		170~230MHz	212.5~350MHz	
Supply Voltage	V _{cc}		+3.3±0.165V	+2.5±0.125V/+3.3±0.165V	
Frequency Tolerance (Includes frequency tolerance at room temperature.)	f _{tol}			±50×10 ⁻⁶ max.	
Storage Temperature Range	T _{stg}			-40~+85°C	
Operating Temperature Range	T _{use}			-20~+70°C	
Current Consumption	I _{cc}		70mA max.	80mA max.	60mA max.
Stand-by Current (#1 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	t _r , t _f		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} ×0.3max.	
OE Pin 1 Level input Voltage	V _{iH}			V _{cc} ×0.7min.	
Output Disable Time	t _{PLZ}			200ns max.	
Output Enable Time	t _{PZL}			2ms max.	
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 (φ 180)		

(1) Measured WAVECREST DTS-2075

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

Consult our sales representative for other specifications.

■ Dimensions [mm]



■ Recommended Land Pattern [mm]

