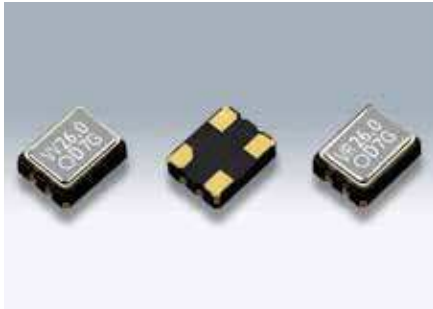


SMD Voltage Controlled Crystal Oscillators

DSV321SV/DSV321SR



Actual size

■ Features

- 3225 size, 1.1 mm high. Miniature SMD-VCXO
- The product is an analog VCXO which ensures good variable frequency and a linear changing frequency.
- Low current consumption



■ Applications

- DVD, Digital TV, STB, ADSL, BB modem, backbone transmission equipment

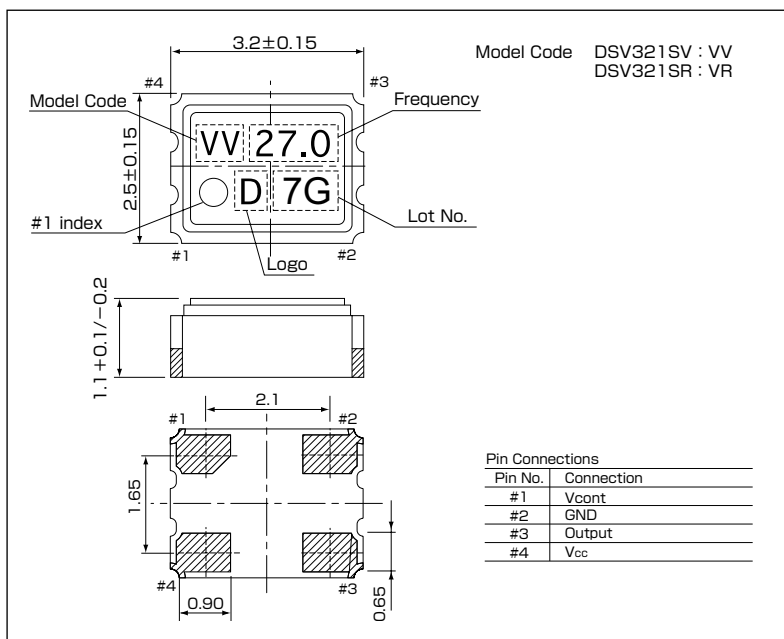
■ Standard Specification

Item	Type	Legend	DSV321SV	DSV321SR
Output Frequency Range		fo	13.5~54MHz	6.75~90MHz
Supply Voltage		Vcc	+2.8V±0.28V	+3.3V±0.33V
Frequency Control Voltage		Vcont	+1.4±1.4V	+1.65±1.65V
Storage Temperature Range		T_stg	-40~+85°C	
Operating Temperature Range		T_use	-10~+70°C / -30~+85°C	
Frequency Tolerance (Includes frequency tolerance at room temperature.)		f_tol	±40×10 ⁻⁶ max.	
Frequency Adjustment Range		f_cont	±125×10 ⁻⁶ min./±100×10 ⁻⁶ min. [Positive Slope]	
Current Consumption		lcc	3mA max.(13.5≤fo≤40MHz) 5mA max.(40<fo≤54MHz) [No Load]	2mA max.(13.5≤fo≤36MHz) 3mA max.(36<fo≤54MHz) [No Load]
Load Condition		L_cmos	15pF	
Symmetry		SYM	40~60% [50% Vcc Level]	
0 Level Output Voltage		VoL	Vcc×0.1 max.	
1 Level Output Voltage		VoH	Vcc×0.9 min.	
Rise and Fall Time		tr, tf	10ns max.(13.5≤fo≤40MHz) 6ns max.(40<fo≤54MHz) [10~90% Vcc Level]	10ns max.(13.5≤fo≤40MHz) 6ns max.(40<fo≤54MHz) 4ns max.(54<fo≤90MHz) [10~90% Vcc Level]
Period Jitter (1)		tRMS	2.4ps typ. (σ)	
		tp-p	22ps typ. (Peak to peak)	
Total Jitter (1)		tTL	33ps typ. [tDJ + n*tRJ n=14.1 (BER=1 * 10 ⁻¹²)(2)]	49ps typ. [tDJ + n*tRJ n=14.1 (BER=1 * 10 ⁻¹²)(2)]
Phase Jitter		tpj	1ps max. (10≤fo<40MHz,fo offset: 12kHz~5MHz, fo≥40MHz,fo offset: 12kHz~20MHz)	1.5ps max. (fo<40MHz,fo offset: 12kHz~5MHz, fo≥40MHz,fo offset: 12kHz~20MHz)
Packing Unit		-	2000pcs./reel(φ180)	

(1) Measured WAVECREST DTS-2075
(2) tDJ:Deterministic jitter tRJ:Random jitter

Consult our sales representative for other specifications.

■ Dimensions[mm]



■ Recommended Land Pattern [mm]

