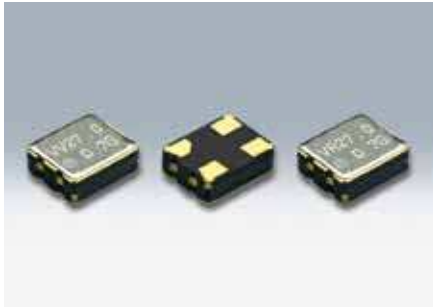


SMD Voltage Controlled Crystal Oscillators

DSV221SV/DSV221SR



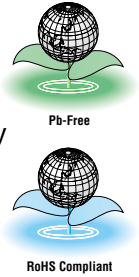
Actual size

■ Features

- 2520 size, 0.815mm high. Miniature SMD-VCXO
- The product is an analog VCXO which ensures good variable frequency and a linear changing frequency
- Low current consumption

■ Applications

- Tuner modules for terrestrial digital media broadcasting, Media Player, PND
- DVD, Digital TV, STB



■ Standard Specification

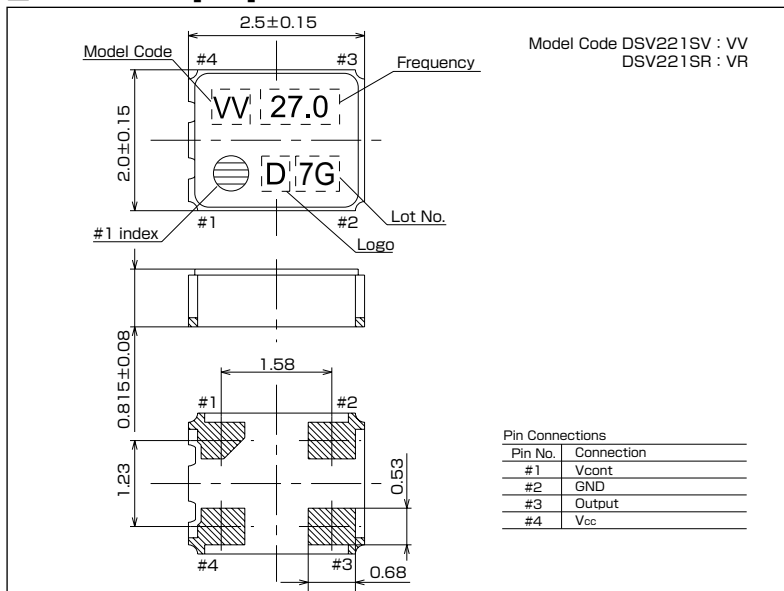
Item	Type	Legend	DSV221SV	DSV221SR
Output Frequency Range		fo	6.75~90MHz	
Supply Voltage		Vcc	+2.8V±0.28V	+3.3V±0.33V
Frequency Control Voltage		Vcont	+1.4±1.4V	+1.65±1.65V
Storage Temperature Range		T_stg	-40~+85°C	
Operating Temperature Range		T_use	-10~70°C / -30~+85°C	
Frequency Tolerance (Includes frequency tolerance at room temperature.)		f_tol	±40×10 ⁻⁶ max.	
Frequency Adjustment Range		f_cont	±125×10 ⁻⁶ min. [Positive Slope]	±100×10 ⁻⁶ min. [Positive Slope]
Current Consumption		Icc	3mA max.(6.75≤fo≤40MHz) 5.5mA max.(40<fo≤65MHz) 9.5mA max.(65<fo≤90MHz) [No Load]	2mA max.(7.5≤fo≤40MHz) 3mA max.(40<fo≤60MHz) [No Load]
Load Condition		L_cmos	15pF	
Symmetry		SYM	45~55% [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.(6.75≤fo≤40MHz) 6ns max.(40<fo≤65MHz) 4ns max.(65<fo≤90MHz) [10~90% Vcc]	10ns max.(6.75≤fo≤40MHz) 6ns max.(40<fo≤65MHz) 4ns max.(65<fo≤90MHz) [10~90% Vcc]
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 ⁻¹³)(2)]	42ps typ. [tDJ + n*tRJ n=14.1(BER=1*10 ⁻¹³)(2)]
Phase Jitter		tpj	1ps max. (10≤fo<40MHz,fo offset: 12kHz~5MHz, fo≥40MHz,fo offset: 12kHz~20MHz)	1.5ps max. (10≤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]

