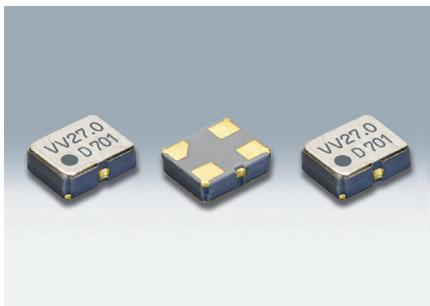


# SMD Voltage Controlled Crystal Oscillators

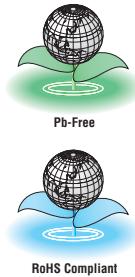
## DSV211AV/DSV211AR



Actual size □

### ■ Features

- 2016size, 0.72mm height. Ultra 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
- Camera modules

### ■ Standard Specification

Item	Type	Legend	DSV211AV	DSV211AR
Output Frequency Range	fo		19.2 to 80MHz	12MHz, 19.2 to 80MHz
Supply Voltage	Vcc		+2.8V±0.28V	+3.3V±0.33V
Frequency Control Voltage	Vcont		+1.4V±1.4V	+1.65V±1.65V
Storage Temperature Range	T_stg			-40 to +85°C
Operating Temperature Range	T_use			-10 to 70°C / -30 to +85°C
Frequency Tolerance (Includes frequency tolerance at room temperature.)	f_tol			±40×10 <sup>-6</sup> max.
Frequency Adjustment Range	f_cont		±100×10 <sup>-6</sup> min. [Positive Slope]	±80×10 <sup>-6</sup> min. [Positive Slope]
Current Consumption	Icc		9.4mA max. [No Load]	13.6mA max. [No Load]
Load Condition	L_cmos			15pF
Symmetry	SYM			45 to 55% [50% Vcc Level]
0 Level Output Voltage	Vol			Vcc×0.1 max.
1 Level Output Voltage	Vol			Vcc×0.9 min.
Rise and Fall Time	tr, tf			10ns max. [10 to 90% Vcc Level]
Period Jitter (1)	tRMS		2.5ps typ. ( $\sigma$ )	3.2ps typ. ( $\sigma$ )
	tp-p		23ps typ. (Peak to peak)	29ps typ. (Peak to peak)
Total Jitter (1)	tTL		35ps typ. [tDJ + n×tRJ n=14.1(BER=1×10 <sup>-12</sup> )(2)]	45ps typ. [tDJ + n×tRJ n=14.1(BER=1×10 <sup>-12</sup> )(2)]
Phase Jitter	tpj		1ps max. (fo offset: 12kHz to 5MHz)	1.5ps max. (fo offset: 12kHz to 5MHz)
Packing Unit	—			3000pcs./reel(Φ180)

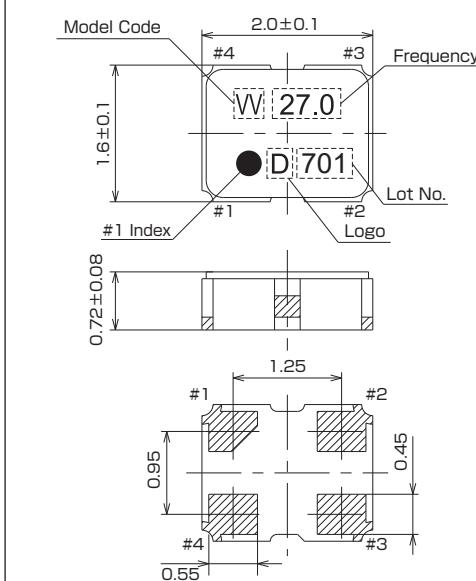
(1)Measured WAVECREST DTS-2075

(2)tDJ:Deterministic jitter tRJ:Random jitter

Consult our sales representative for other specifications.

[mm]

### ■ Dimensions



Model Code DSV211AV : VV  
DSV211AR : VR

Pin Connections	
Pin No.	Connection
#1	Vcont
#2	GND
#3	Output
#4	Vcc

### ■ Recommended Land Pattern

