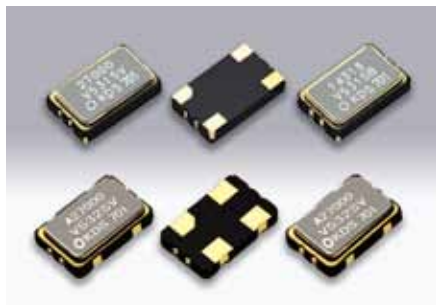


SMD Voltage Controlled Crystal Oscillators

DSV531SV, DSV532SV/DSV531SB, DSV532SB



Actual size

■ Features

- 5032 size, 1.2mm height. Miniature SMD-VCXO (0.022cc)
- The product is an analog VCXO which ensures good variable frequency and a linear changing frequency.

■ Applications

- DVD, Digital TV, STB, backbone transmission equipment



■ Standard Specification

Item	Type	Legend	DSV531SV/DSV532SV	DSV531SB/DSV532SB
Output Frequency Range		f _o	1.25 to 80MHz	5 to 50MHz
Supply Voltage		V _{cc}	+3.3V±0.3V	+5.0V±0.5V
Frequency Control Voltage		V _{cont}	+1.65V±1.65V	+2.5V±2.0V
Storage Temperature Range		T _{stg}	-40 to +85°C	
Operating Temperature Range		T _{use}	-10 to +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}	10mA max. (f _o ≤60MHz) 15mA max. (f _o >60MHz) [No Load]	15mA max. [No Load]
Load Condition		L _{CMOS}	15pF max.	
Symmetry		SYM	40 to 60% [50% V _{cc} Level]	
0 Level Output Voltage		V _{OL}	V _{cc} ×0.1 max.	
1 Level Output Voltage		V _{OH}	V _{cc} ×0.9 min.	
Rise and Fall Time		t _r , t _f	10ns max. (f _o ≤50MHz) 6ns max. (f _o >50MHz) [10 to 90% V _{cc} Level]	10ns max. [10 to 90% V _{cc} Level]
Period Jitter (1)		t _{RMS}	2.2ps typ. [σ]	
		t _{p-p}	20ps typ. [Peak to peak]	
Total Jitter (1)		t _{TL}	31ps typ. [t _{DJ} +n×t _{RJ} n=14.1 (BER=1×10 ⁻¹²) (2)]	
Phase Jitter		t _{pj}	1ps max. [10MHz≤f _o <40MHz, f _o offset:12kHz to 5MHz f _o ≥40MHz, f _o offset:12kHz to 20MHz]	
Packing Unit (3)		-	1000pcs./reel (φ180)	

(1) Measured WAVECREST DTS-2075

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

(3) Moisture prevention packing is unnecessary.

Moisture Sensitivity Level : Level 1 (IPC/JEDEC J-STD-033)

Consult our sales representative for other specifications.

■ DSV531S SERIES

■ DSV532S SERIES

[mm]

