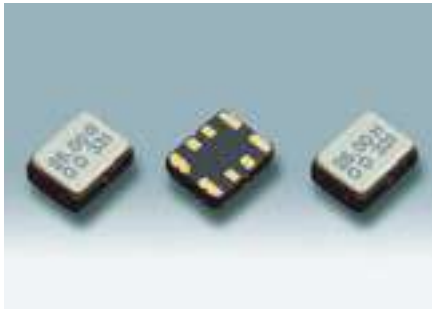



SMD (VC-) TCXO

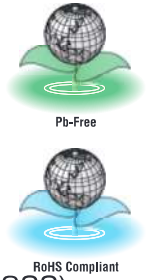
DSA321SD/ DSB321SD for GPS / Industrial Radio system



Actual size 

Features

- 3225 size, 0.9 mm high miniature SMD VC-TCXO (0.008cc, 0.003g)
- Low voltage. Supply voltage up to $+2.4 \pm 0.1V$.
- Low current consumption
- Low phase noise
- Single packaged structure making the use of moisture-proof packaging unnecessary. Moisture Sensitivity Level: LEVEL 1 (IPC/JEDEC J-STD-033)



Applications

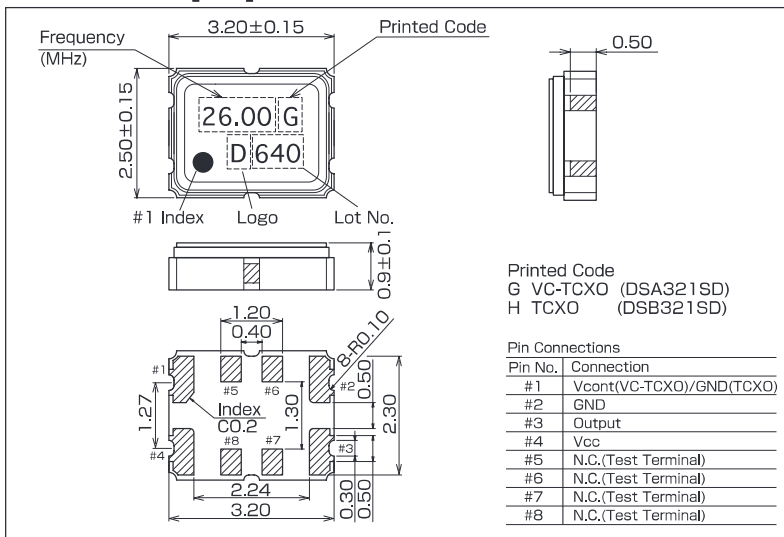
- GPS and industrial radio communications

Standard Specification

Item	Type	DSA321SD (VC-TCXO)	DSB321SD (TCXO)
Output Frequency Range		9.6 MHz to 40 MHz	
Standard Frequency		10/ 12.504/ 13/ 14.4/ 16.3676/ 16.369/ 16.8/ 18.414/ 23.104/ 24.5535/ 26 MHz	
Supply Voltage		$+2.6V$ / $+2.8V$ / $+3.0V$	
Current Consumption		$+1.2$ mA max. ($F \leq 15$ MHz) / $+1.4$ mA max. ($15 < F \leq 26$ MHz) / $+1.6$ mA max. ($F > 26$ MHz)	
Output Level		0.8 Vp-p min. (Clipped Sinewave / DC-coupled)	
Harmonics		-5dBc max.	
Output Load		10k Ω //10 pF	
Frequency Stability		$\pm 1.5 \times 10^{-6}$ max. (After 2 reflows)	
Tolerance			
vs. Temperature		$\pm 1.0 \times 10^{-6}$ max. / -40 to +85 deg C $\pm 0.5 \times 10^{-6}$ max. / -40 to +85 deg C (Option)	
vs. Supply Voltage		$\pm 0.2 \times 10^{-6}$ max. ($V_{cc} \pm 5\%$)	
vs. Load Variation		$\pm 0.2 \times 10^{-6}$ max. (10 k Ω //10 pF $\pm 10\%$)	
vs. Aging		$\pm 1.0 \times 10^{-6}$ max. /year	
Start up Time		2.0 msec. max.	
Frequency Control			
Control Sensitivity		± 3 to $\pm 5 \times 10^{-6}$ / $V_{cont} = +1.5V \pm 1V$	-
Response Slope		Positive	-
Phase Noise		[$F \leq 15$ MHz] -115 dBc/Hz (Offset 100Hz) -135 dBc/Hz (Offset 1kHz) -145 dBc/Hz (Offset 10kHz) -145 dBc/Hz (Offset 100kHz)	[15MHz < $F \leq 26$ MHz] -110 dBc/Hz (Offset 100Hz) -130 dBc/Hz (Offset 1kHz) -140 dBc/Hz (Offset 10kHz) -145 dBc/Hz (Offset 100kHz)
			[$F > 26$ MHz] -105 dBc/Hz (Offset 100Hz) -125 dBc/Hz (Offset 1kHz) -135 dBc/Hz (Offset 10kHz) -145 dBc/Hz (Offset 100kHz)
Packing Unit		2000pcs./reel ($\phi 180$)	

Consult our sales representative for other specifications.

Dimensions [mm]



Recommended Land Pattern [mm]

