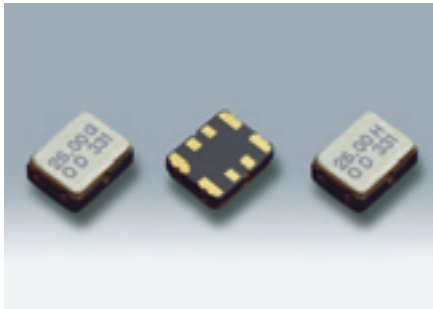


# SMD (VC-) TCXO

**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±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

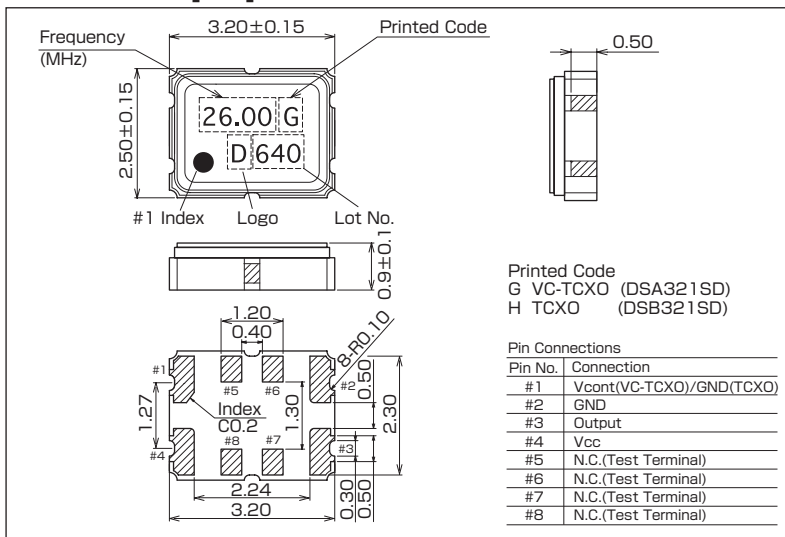
- GPS and industrial radio communications

## ■ 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		+2.6 V / +2.8 V / +3.0V	
Current Consumption		+1.2 mA max. (F≤15MHz) / +1.4 mA max. (15<F≤26MHz) / +1.6 mA max. (F>26MHz)	
Output Level		0.8 Vp-p min. (Clipped Sinewave / DC-coupled)	
Harmonics		-5dBc max.	
Output Load		10kΩ//10 pF	
Frequency Stability		±1.5×10 <sup>-6</sup> max.( After 2 reflows )	
Tolerance			
vs. Temperature		±1.0×10 <sup>-6</sup> max. / - 40 to +85 deg C ±0.5×10 <sup>-6</sup> max. / - 40 to +85 deg C(Option)	
vs. Supply Voltage		±0.2×10 <sup>-6</sup> max. (Vcc ± 5%)	
vs. Load Variation		±0.2×10 <sup>-6</sup> max. ( 10 kΩ//10 pF ±10%)	
vs. Aging		±1.0×10 <sup>-6</sup> max. /year	
Start up Time		2.0 msec. max.	
Frequency Control			
Control Sensitivity		± 3 to ± 5×10 <sup>-6</sup> / Vcont = +1.5V ± 1V	-
Response Slope		Positive	-
Phase Noise		[F≤15MHz] -115 dBc/Hz (Offset 100Hz) -135 dBc/Hz (Offset 1kHz) -145 dBc/Hz (Offset 10kHz) -145 dBc/Hz (Offset 100kHz)	[15MHz<F≤26MHz] -110 dBc/Hz (Offset 100Hz) -130 dBc/Hz (Offset 1kHz) -140 dBc/Hz (Offset 10kHz) -145 dBc/Hz (Offset 100kHz) [F>26MHz] -105 dBc/Hz (Offset 100Hz) -125 dBc/Hz (Offset 1kHz) -135 dBc/Hz (Offset 10kHz) -145 dBc/Hz (Offset 100kHz)
Packing Unit		2000pcs./reel (φ 180)	

Consult our sales representative for other specifications.

## ■ Dimensions [mm]



## ■ Recommended Land Pattern [mm]

