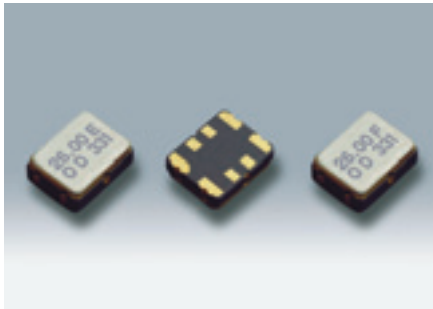


# SMD (VC-) TCXO

## DSA321SC/DSB321SC for Mobile communications



Actual size

### Features

- 3225 size, 0.9 mm high miniature SMD VC-TCXO (0.008cc, 0.03g)
- 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

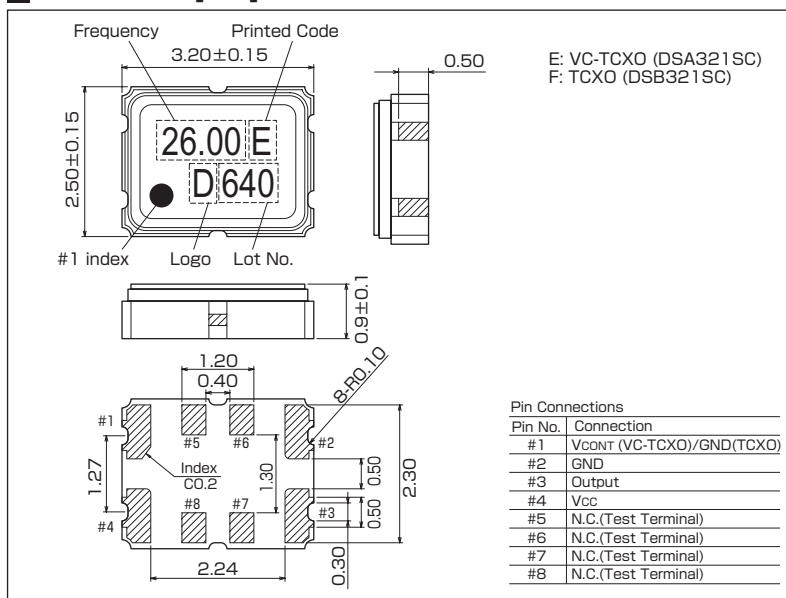
- Mobile phones (W-CDMA, CDMA2000, GSM, PCN, PCS, PHS)

### Standard Specification

Item	Type	DSA321SC (VC-TCXO)	DSB321SC (TCXO)
Output Frequency Range		9.6 MHz to 40 MHz	
Standard Frequency		12.6/ 13/ 14.4/ 16.8/ 19.2/ 19.68/ 19.8/ 20/ 26/ 38.4 MHz	
Supply Voltage		+2.6 V / +2.8 V / +3.0V	
Current Consumption		+1.3 mA max. ( $9.6 \leq F \leq 26\text{MHz}$ ) / +1.5 mA max. ( $F > 26\text{MHz}$ )	
Output Level		0.8 Vp-p min. (Clipped Sinewave / DC-coupled)	
Harmonics		-5dBc max.	
Output Load		10k $\Omega$ //10 pF	
Frequency Stability Tolerance		$\pm 1.5 \times 10^{-6}$ max. (After 2 reflows)	
vs. Temperature		$\pm 2.0 \times 10^{-6}$ max. / -30 to +85 deg. C @CDMA $\pm 2.5 \times 10^{-6}$ max. / -30 to +85 deg. C @GSM	
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 $\Omega$ //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		$\pm 5.5$ to $\pm 9.5 \times 10^{-6}$ / $V_{cont} = +1.4V \pm 1V$ @CDMA $\pm 9$ to $\pm 15 \times 10^{-6}$ / $V_{cont} = +1.5V \pm 1V$ @GSM	—
Response Slope		Positive	—
Phase Noise		[ $F \leq 15\text{MHz}$ ] -115 dBc/Hz (Offset 100Hz) -135 dBc/Hz (Offset 1kHz) -145 dBc/Hz (Offset 10kHz) -145 dBc/Hz (Offset 100kHz)	[ $15\text{MHz} < F \leq 26\text{MHz}$ ] -110 dBc/Hz (Offset 100Hz) -130 dBc/Hz (Offset 1kHz) -140 dBc/Hz (Offset 10kHz) -145 dBc/Hz (Offset 100kHz)
			[ $F > 26\text{MHz}$ ] -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]

