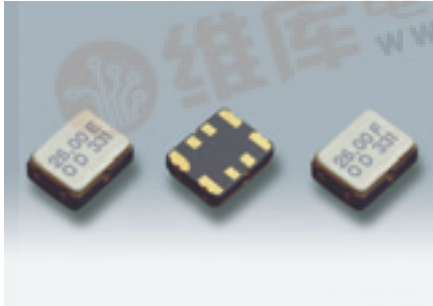


SMD (VC-) TCXO

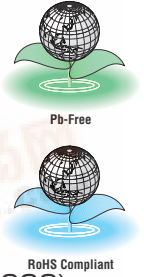
DSA321SC/DSB321SC for Mobile communications



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

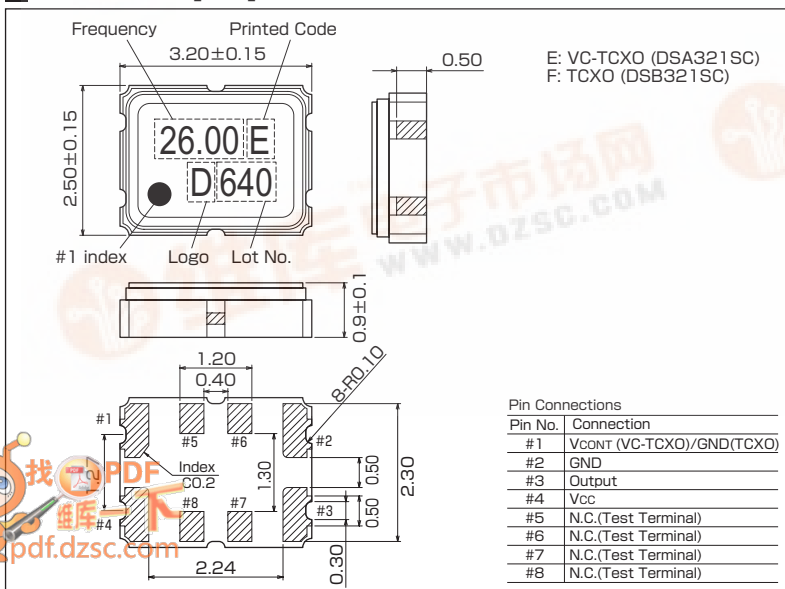
- Mobile phones (W-CDMA, CDMA2000, GSM, PCN, PCS, PHS)

Standard Specification

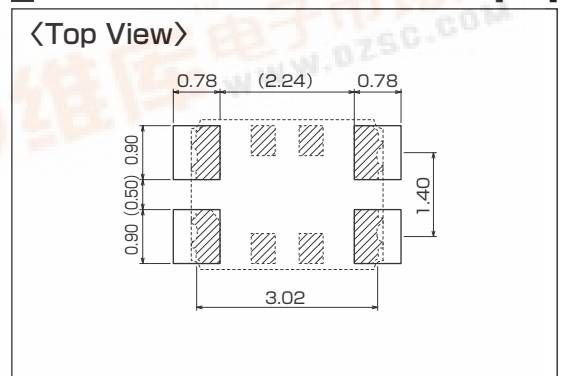
Item	Type	DSA321SC (VC-TCXO)	DSB321SC (TCXO)
Output Frequency Range		9.6 MHz to 40 MHz	
Standard Frequency		12.6/ 13/ 14.4/ 16.8/ 19.2/ 19.68/ 19.8/ 20/ 26/ 38.4 MHz	
Supply Voltage		$+2.6V / +2.8V / +3.0V$	
Current Consumption		$+1.3mA$ max. ($9.6 \leq F \leq 26MHz$) / $+1.5mA$ max. ($F > 26MHz$)	
Output Level		0.8 Vp-p min. (Clipped Sinewave / DC-coupled)	
Harmonics		-5dBc max.	
Output Load		10kΩ/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 kΩ/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		± 5.5 to $\pm 9.5 \times 10^{-6}$ / $V_{cont} = +1.4V \pm 1V$ @CDMA	-
Response Slope		± 9 to $\pm 15 \times 10^{-6}$ / $V_{cont} = +1.5V \pm 1V$ @GSM	-
Phase Noise	[$F \leq 15MHz$]	-115 dBc/Hz (Offset 100Hz)	-105 dBc/Hz (Offset 100Hz)
		-135 dBc/Hz (Offset 1kHz)	-125 dBc/Hz (Offset 1kHz)
		-145 dBc/Hz (Offset 10kHz)	-135 dBc/Hz (Offset 10kHz)
		-145 dBc/Hz (Offset 100kHz)	-145 dBc/Hz (Offset 100kHz)
	[$15MHz < F \leq 26MHz$]	-110 dBc/Hz (Offset 100Hz)	-110 dBc/Hz (Offset 100Hz)
	-130 dBc/Hz (Offset 1kHz)	-130 dBc/Hz (Offset 1kHz)	
	-140 dBc/Hz (Offset 10kHz)	-140 dBc/Hz (Offset 10kHz)	
	-145 dBc/Hz (Offset 100kHz)	-145 dBc/Hz (Offset 100kHz)	
	[$F > 26MHz$]	-105 dBc/Hz (Offset 100Hz)	-105 dBc/Hz (Offset 100Hz)
		-125 dBc/Hz (Offset 1kHz)	-125 dBc/Hz (Offset 1kHz)
		-135 dBc/Hz (Offset 10kHz)	-135 dBc/Hz (Offset 10kHz)
		-145 dBc/Hz (Offset 100kHz)	-145 dBc/Hz (Offset 100kHz)
Packing Unit		2000pcs./reel ($\phi 180$)	

Consult our sales representative for other specifications.

Dimensions [mm]



Recommended Land Pattern [mm]



Pin Connections

Pin No.	Connection
#1	VCONT (VC-TCXO)/GND(TCXO)
#2	GND
#3	Output
#4	Vcc
#5	N.C.(Test Terminal)
#6	N.C.(Test Terminal)
#7	N.C.(Test Terminal)
#8	N.C.(Test Terminal)

