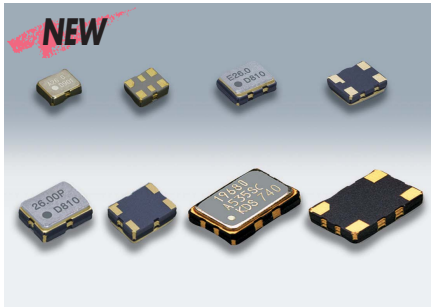


SMD VC-TCXO/TCXO

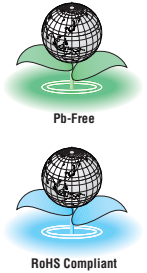
DSA211SCA/DSA221SCA/DSA321SCA/DSA535SC
DSB211SCA/DSB221SCA/DSB321SCA/DSB535SC for Mobile communications



Actual size DSA211SCA DSA221SCA DSA321SCA DSA535SC

Features

- Wide voltage range, Supply voltage up to +2.3~+5.5V
- Low phase noise
- Single packaged structure
- Prevention of moisture packing is unnecessary.
Moisture Sensitivity Level: LEVEL 1
(IPC/JEDEC J-STD-033)



Applications

- Mobile phones (W-CDMA, CDMA2000, TD-SCDMA, GSM, GPRS, PHS)
- Other wireless radio communications (e.g. Mobile WiMAX)

[Type]

VC-TCXO	TCXO	Size
DSA211SCA	DSB211SCA	2016 size
DSA221SCA	DSB221SCA	2520 size
DSA321SCA	DSB321SCA	3225 size
DSA535SC	DSB535SC	5032 size

Standard Specification

Type	VC-TCXO				TCXO			
Item	DSA211SCA	DSA221SCA	DSA321SCA	DSA535SC	DSB211SCA	DSB221SCA	DSB321SCA	DSB535SC
Frequency Range	13~52MHz		9.6~52MHz		10~30MHz		13~52MHz	
Standard Frequency	13/ 19.2/ 20/ 26/ 38.4/ 40/ 52MHz		13/ 19.2/ 26MHz		13/ 19.2/ 20/ 26/ 38.4/ 40/ 52MHz		13/ 19.2/ 26MHz	
Supply Voltage (Vdd)	+2.6V/ +2.8V/ +3.0V/ +3.3V							
Current Consumption	+1.5mA max. (f≤26MHz)		+1.1mA max. (F≤15MHz)		+1.5mA max. (f≤26MHz)		+1.1mA max. (F≤15MHz)	
	+2.0mA max. (f>26MHz)		+1.3mA max. (F>15MHz)		+2.0mA max. (f>26MHz)		+1.3mA max. (F>15MHz)	
Output Level	0.8Vp-p min. (Clipped Sinewave / DC-coupled)							
Output Load	10kΩ//10pF							
Frequency Stability	±1.5×10 ⁻⁶ max.(After 2 reflows) ±2.0×10 ⁻⁶ max./ -30~+85℃ @CDMA ±2.5×10 ⁻⁶ max./ -30~+85℃ @GSM ±0.2×10 ⁻⁶ max. (Vdd±5%) ±0.2×10 ⁻⁶ max. (10kΩ//10pF±10%) ±1.0×10 ⁻⁶ max. /year							
Tolerance								
vs. Temperature								
vs. Supply Voltage								
vs. Load Variation								
vs. Aging								
Start Up Time	2.0ms max.							
Frequency Control	±7.8×10 ⁻⁶ ~±12×10 ⁻⁶ / Vcont=+1.4V±1V @CDMA ±9.0×10 ⁻⁶ ~±15×10 ⁻⁶ / Vcont=+1.5V±1V @GSM				—			
Control Sensitivity								
Response Slope								
Phase Noise	Positive				—			
Offset 100Hz	[f≤15MHz] [15<f≤26MHz] [26<f≤40MHz]		[f≤15MHz] [f≤15MHz]		[f≤15MHz] [15<f≤26MHz] [26<f≤40MHz]		[f≤15MHz] [f≤15MHz]	
Offset 1kHz	-115dBc/Hz -110dBc/Hz -105dBc/Hz		-110dBc/Hz -105dBc/Hz		-115dBc/Hz -110dBc/Hz -105dBc/Hz		-110dBc/Hz -105dBc/Hz	
Offset 10kHz	-135dBc/Hz -130dBc/Hz -125dBc/Hz		-130dBc/Hz -125dBc/Hz		-135dBc/Hz -130dBc/Hz -125dBc/Hz		-130dBc/Hz -125dBc/Hz	
Offset 100kHz	-145dBc/Hz -140dBc/Hz -145dBc/Hz		-145dBc/Hz -145dBc/Hz		-145dBc/Hz -145dBc/Hz -145dBc/Hz		-145dBc/Hz -145dBc/Hz	
Packing Unit	2000pcs./reel (ϕ 180)		4000pcs./reel (ϕ 330)		2000pcs./reel (ϕ 180)		4000pcs./reel (ϕ 330)	

Consult our sales representative for other specifications.

SMD VC-TCXO/TCXO

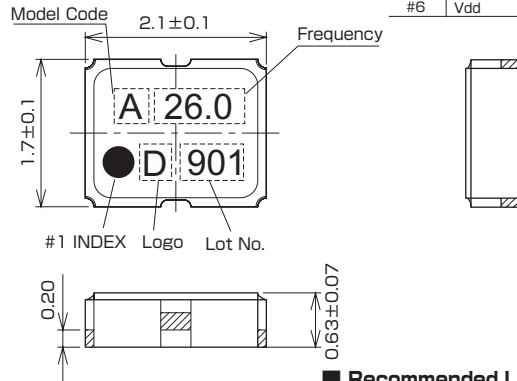
DSA211SCA/DSA221SCA/DSA321SCA/DSA535SC
DSB211SCA/DSB221SCA/DSB321SCA/DSB535SC for Mobile communications

■ Dimensions[mm]

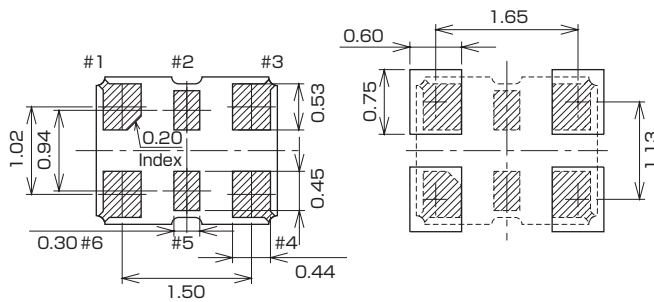
DSA211SCA/DSB211SCA

Model Code
A : VC-TCXO (DSA211SCA)
B : TCXO (DSB211SCA)

Pin No.	Connection
#1	Vcont(VC-TCXO)/GND(TCXO)
#2	N.C./GND(Test Terminal)
#3	GND
#4	Output
#5	N.C./GND(Test Terminal)
#6	Vdd



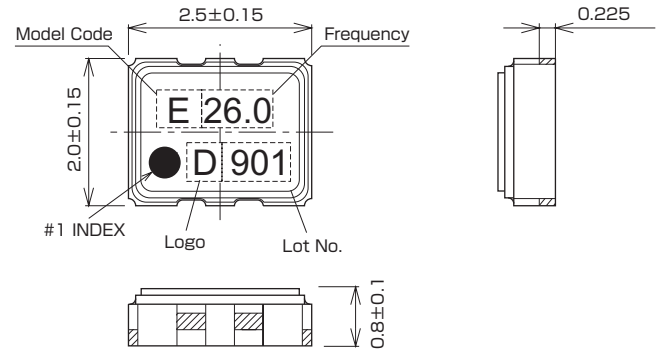
■ Recommended Land Pattern <Top View>



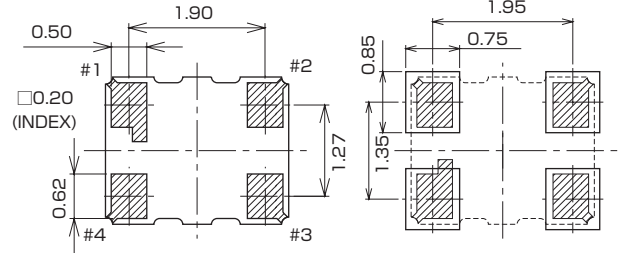
DSA221SCA/DSB221SCA

Model Code
E : VC-TCXO (DSA221SCA)
F : TCXO (DSB221SCA)

Pin No.	Connection
#1	Vcont(VC-TCXO)/GND(TCXO)
#2	GND
#3	Output
#4	Vdd



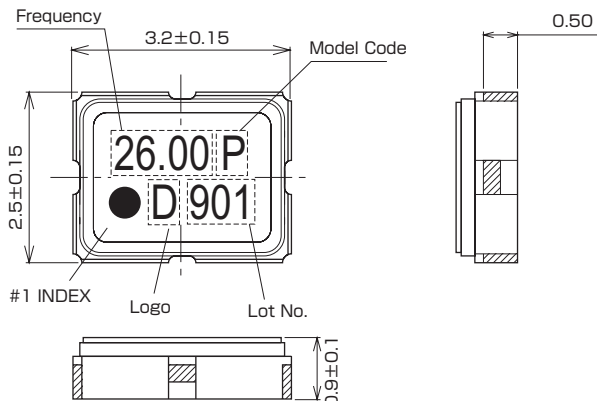
■ Recommended Land Pattern <Top View>



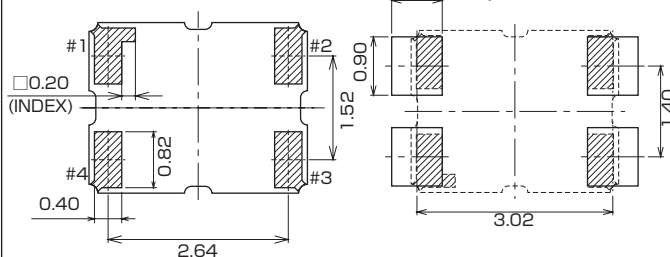
DSA321SCA/DSB321SCA

Model Code
P : VC-TCXO (DSA321SCA)
Q : TCXO (DSB321SCA)

Pin No.	Connection
#1	Vcont(VC-TCXO)/GND(TCXO)
#2	GND
#3	Output
#4	Vdd



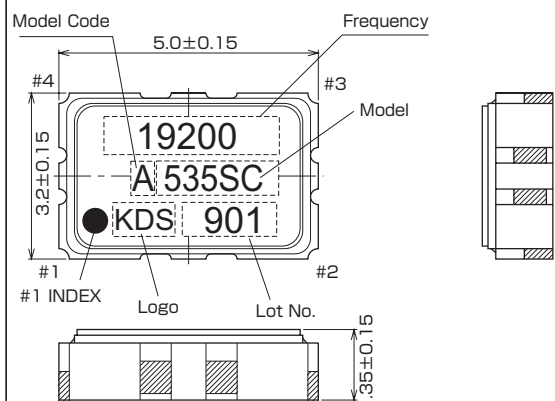
■ Recommended Land Pattern <Top View>



DSA535SC/DSB535SC

Model Code
A : VC-TCXO (DSA535SC)
B : TCXO (DSB535SC)

Pin No.	Connection
#1	Vcont(VC-TCXO)/GND(TCXO)
#2	GND
#3	Output
#4	Vdd



■ Recommended Land Pattern <Top View>

