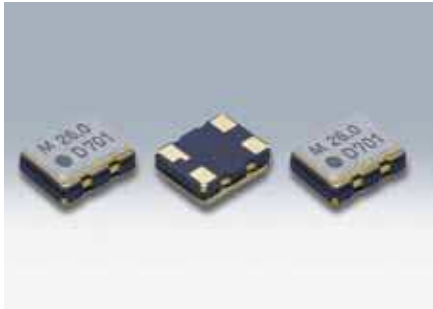


# SMD VC-TCXO / TCXO

## DSA221SJ/DSB221SJ

for Industrial Radio system



Actual size

### ■ Features

- Supply voltage up to +2.3~+3.6V
- CMOS Level Output
- Low phase noise
- Single package structure
- Prevention of moisture packing is unnecessary.  
Moisture Sensitivity Level: LEVEL 1 (IPC/JEDEC J-STD-033)



### ■ Applications

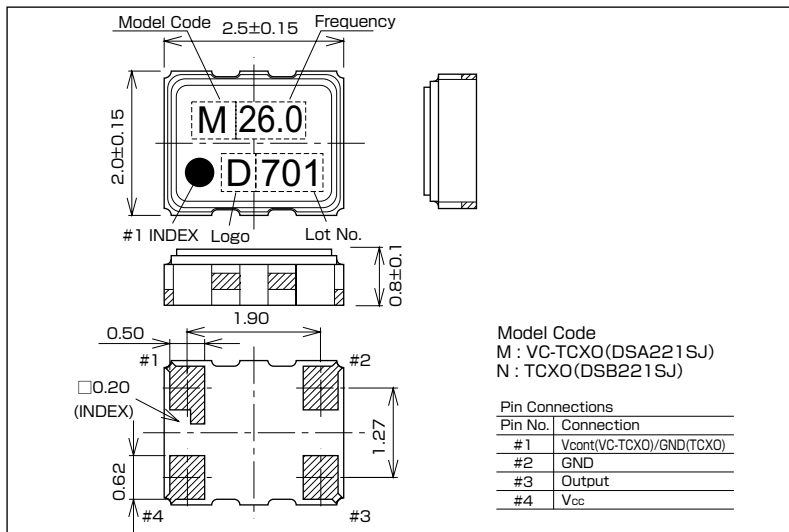
- Industrial radio communications

### ■ Standard Specification

Item \ Type	VC-TCXO		TCXO	
	DSA221SJ		DSB221SJ	
Output Frequency Range	10~40MHz			
Standard Frequency	13/ 19.2/ 20/ 26/ 38.4/ 40MHz			
Supply Voltage(Vcc)	+2.6V / +2.8V / +3.0V / +3.3V			
Current Consumption	+4.0mA max.(f≤26MHz) / +6.0mA max.(f>26MHz)			
0 Level Output Voltage	Vcc×0.1V			
1 Level Output Voltage	Vcc×0.9V			
Output Load	15pF			
Rise and Fall Time	10ns max.(10%~90% Vcc Level)			
Frequency Stability Tolerance	±1.5×10 <sup>-6</sup> max.(After 2 reflows)			
vs. Temperature	±2.5×10 <sup>-6</sup> max./ -30~+85°C			
vs. Supply Voltage	±0.3×10 <sup>-6</sup> max.(Vcc±5%)			
vs. Aging	±1.0×10 <sup>-6</sup> max. /year			
Frequency Control Control Sensitivity	±9×10 <sup>-6</sup> ±15×10 <sup>-6</sup> / Vcont=+1.5V±1.0V		-	
Response Slope	Positive		-	
Start up Time	2.0ms max.			
Phase Noise	[f≤15MHz]	[15MHz<f≤26MHz]	[f>26MHz]	
Offset 100Hz	-115dBc/Hz	-110dBc/Hz	-105dBc/Hz	
Offset 1kHz	-135dBc/Hz	-130dBc/Hz	-125dBc/Hz	
Offset 10kHz	-145dBc/Hz	-140dBc/Hz	-135dBc/Hz	
Offset 100kHz	-145dBc/Hz	-145dBc/Hz	-145dBc/Hz	
Packing Unit	2000pcs./reel (φ 180)			

Consult our sales representative for other specifications.

### ■ Dimensions[mm]



### ■ Recommended Land Pattern [mm]

