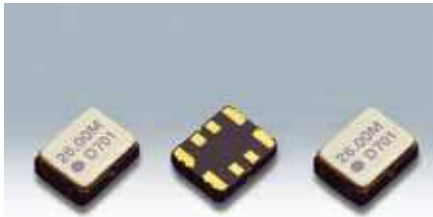


# SMD VC-TCXO/TCXO (For Automotive)

## DSA321SF/DSB321SF for Automotive Applications



### ■ Features

- Capable of operating over a wide temperature range, from -40 to 105°C.
- Low phase noise
- Single packaged structure
- Prevention of moisture packing is unnecessary  
Moisture Sensitivity Level: LEVEL 1 (IPC/JEDEC J-STD-033)
- AEC-Q100 Compliant



### ■ Applications

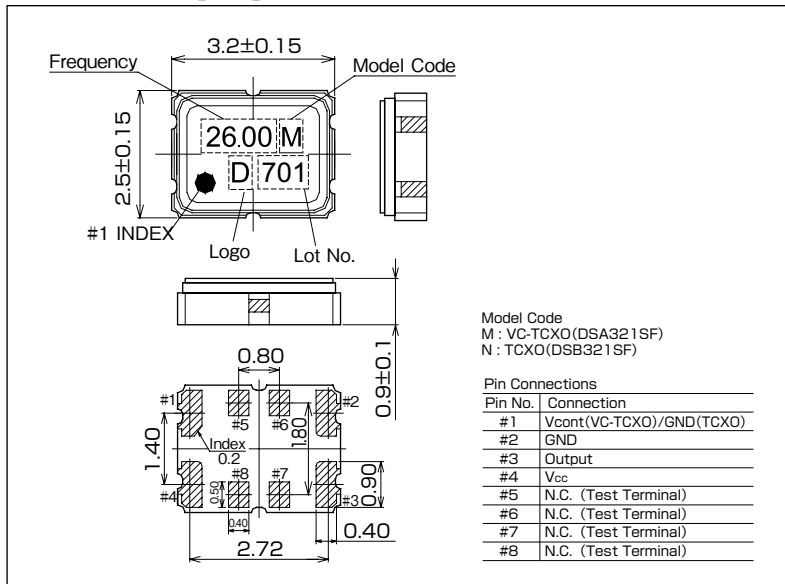
- Telematics, Satellite radio

### ■ Standard Specification Actual size

Item	Type	DSA321SF(VC-TCXO)	DSB321SF(TCXO)
Output Frequency Range		9.6~40MHz	
Standard Frequency		24.035/ 24.265/ 26MHz	
Supply Voltage (Vcc)		+2.6V/ +2.8V/ +3.0V/ +3.3V	
Current Consumption		+1.3mA max. (9.6<f≤26MHz)/ +1.5mA max. (f>26MHz)	
Output Level		0.8Vp-p min. (Clipped Sinewave/DC-coupled)	
Output Load		10kΩ//10pF	
Frequency Stability Tolerance		±1.5×10 <sup>-6</sup> max. (After 2 reflows)	
vs. Temperature		±2.5×10 <sup>-6</sup> max./-40~+85°C ±10×10 <sup>-6</sup> max./+85~+105°C	
vs. Supply Voltage		±0.2×10 <sup>-6</sup> max. (Vcc±5%)	
vs. Load Variation		±0.2×10 <sup>-6</sup> max. (10kΩ//10pF±10%)	
vs. Aging		±1.0×10 <sup>-6</sup> max./year	
Start up Time		2.0 ms max.	
Frequency Control Control Sensitivity		±9×10 <sup>-6</sup> to ±15×10 <sup>-6</sup> / Vcont=+1.5±1V	-
Response Slope		Positive	-
Phase Noise		[f≤15MHz] - 115dBc/Hz(Offset 100Hz) - 135dBc/Hz(Offset 1kHz) - 145dBc/Hz(Offset 10kHz) - 145dBc/Hz(Offset 100kHz)	[15<f≤26MHz] - 110dBc/Hz(Offset 100Hz) - 130dBc/Hz(Offset 1kHz) - 140dBc/Hz(Offset 10kHz) - 145dBc/Hz(Offset 100kHz)
Reliability		AEC-Q100	
Packing Unit		2000pcs./reel(φ180)	

Consult our sales representative for other specifications.

### ■ Dimensions[mm]



### ■ Recommended Land Pattern [mm]

