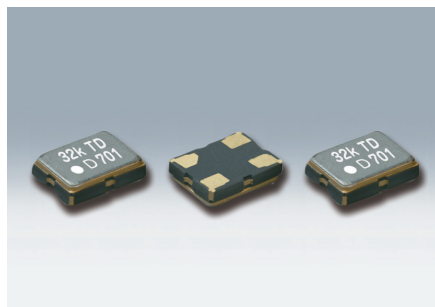


SMD TCXO

DSK321STD/DSK321STA



Actual size

■ Features

- Digital temperature compensated type(DSK321STD)
- Analog temperature compensated type(DSK321STA)
- High precision: $\pm 5.0 \times 10^{-6}$ ($-40 \sim +85^\circ\text{C}$)
 $\pm 3.8 \times 10^{-6}$ ($-10 \sim +60^\circ\text{C}$)
- Low current consumption
- Low voltage operation: $+1.1 \sim +3.6\text{V}$ (DSK321STA)
- Moisture prevention packing is unnecessary.
Moisture Sensitivity Level: Level 1 (IPC/JEDEC J-STD-033)
- AEC-Q 100 compliant



■ Applications

- High precision clock source
- High precision clock source for RTC

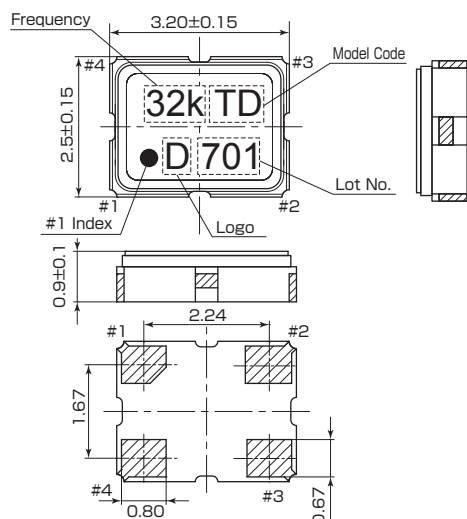
■ Standard Specification

Item	Legend	Spec.				Condition	
		min.	typ.	max.	Unit		
Output Frequency	f _o	—	32.768	—	kHz		
Supply Voltage Range	V _{cc}	+2.0	—	+5.5	V	(Temperature Compensated Operating)	DSK321STD
		+1.3	—	+5.5	V	(Clock Timing Operating)	DSK321STA
		+1.1	—	+3.6			
Frequency Tolerance	f _{tol}	−5.0	—	+5.0	× 10 ^{−6}	−40~+85°C	
		−3.8	—	+3.8		−10~+60°C	
Current Consumption	I _{cc}	—	+1.2	+2.5	μ A	V _{cc} =+3.3V, Temperature Compensation Interval:0.5s, No Load	DSK321STD
		—	+1.7	+3.2		V _{cc} =+5.0V, Temperature Compensation Interval:0.5s, No Load	
		—	+1.0	+2.0		V _{cc} =+3.3V, Temperature Compensation Interval:2.0s, No Load	
		—	+1.5	+3.0		V _{cc} =+5.0V, Temperature Compensation Interval:2.0s, No Load	
	I _{cc}	—	+1.05	+2.4	μ A	V _{cc} =+1.2V, Temperature Compensation Interval:0.5s, No Load	DSK321STA
		—	+1.15	+2.5		V _{cc} =+1.8V, Temperature Compensation Interval:0.5s, No Load	
		—	+0.85	+2.1		V _{cc} =+1.2V, Temperature Compensation Interval:2.0s, No Load	
		—	+0.95	+2.2		V _{cc} =+1.8V, v2.0s, No Load	
Symmetry	SYM	40	50	60	%	at 50% V _{cc}	
0 Level Output Voltage	V _{OL}	—	—	+0.4	V		
1 Level Output Voltage	V _{OH}	V _{cc} -0.4	—	—			
Rise and Fall Time	tr, tf	—	—	50	ns	V _{cc} =+2.0~+5.5V, 10~90% V _{cc} Level	DSK321STD
		—	—	200		V _{cc} =+1.3~+5.5V, 10~90% V _{cc} Level	
		—	—	50	ns	V _{cc} =+1.5~+3.6V, 10~90% V _{cc} Level	DSK321STA
		—	—	200		V _{cc} =+1.1~+1.5V, 10~90% V _{cc} Level	
Load Condition	L _{CMOS}	—	—	15	pF		
Start Up Time	T _{start}	—	—	3.0	s		DSK321STD
		—	—	1.0	s		DSK321STA
Packing Unit	2000pcs./reel (ϕ180)						

Consult our sales representative for other specifications.

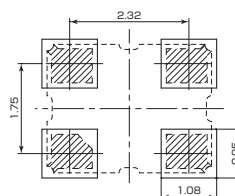
[mm]

■ Dimensions



■ Recommended Land Pattern

<Top View>



Model Code
TD:DSK321STD
TA:DSK321STA

Pin Connections	
Pin No.	Connection
#1	V _{cc}
#2	GND
#3	Output
#4	V _{cc}