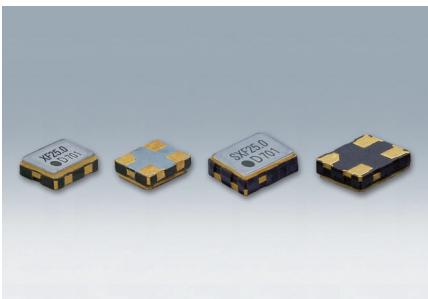


SMD Crystal Oscillators

DSO211SXF/DSO221SXF



Actual size DSO211SXF DSO221SXF

■ Features

- Supply Voltage: 1.8V/2.5V/2.8V/3.3V
- Available frequency range: 1 to 125MHz
- Low profile: 0.7mm (DSO211SXF), 0.8mm (DSO221SXF)
- CMOS Level Output
- Capable of operating over a wide temperature range, from -40 to 125°C.
- 3-state function

■ Applications

- Audio equipment, communication equipment, visual equipment, FA equipment, PC, gaming equipment and WLAN

[Type]

DSO211SXF	2016 size
DSO221SXF	2520 size

[Function Code]

DSO***SXF	A Z
A : 3.3V	Z : ±80×10 ⁻⁶
B : 2.8V	B : ±50×10 ⁻⁶
C : 2.5V	C : ±30×10 ⁻⁶
D : 1.8V	D : ±25×10 ⁻⁶
E	E : ±20×10 ⁻⁶



When requesting the product, please select the model and function code of your request.

■ Standard Specification

Item	Function Code		Output Frequency Range (MHz)	Legend	Spec.			Condition	
	Supply Voltage	Frequency tolerance			min.	typ.	max.		
Supply Voltage	A	*	1≤f ₀ ≤125	V _{CC}	+3.0	+3.3	+3.6	V	
	B				+2.6	+2.8	+3.0		
	C		1≤f ₀ ≤100		+2.25	+2.5	+2.75		
	D				+1.6	+1.8	+2.0		
Frequency Tolerance (includes frequency tolerance at room temperature)	Z	*	* 100≤f ₀ ≤125	f _{TOL}	—	—	+80	-40 to +125°C -40 to +85°C -20 to +70°C (Standard Operating Temperature Range)	
	B				—	—	+50		
	C				—	—	+50		
	D				—	—	+30		
	E				—	—	+25		
Current Consumption	A	*	100≤f ₀ ≤125 40≤f ₀ <100 1≤f ₀ <40	I _{CC}	—	—	10.0	mA No Load	
	B				—	—	4.2		
	C				—	—	2.4		
	D				—	—	9.0		
	A		40≤f ₀ <100 1≤f ₀ <40		—	—	3.7		
	B				—	—	2.2		
	C				—	—	8.0		
	D				—	—	3.4		
	A		1≤f ₀ <40		—	—	2.0		
	B				—	—	2.7		
	C				—	—	1.7		
	D				—	—	10.0		
Stand-by Current (#1 pin "L"Level)	*	*	*	I _{STD}	—	—	10	μA	
Load Condition	*	*	*	L _{CMOS}	—	—	15	pF	
Symmetry	*	*	*	SYM	45	50	55	%	
0 Level Input Voltage	*	*	*	V _{OL}	—	—	V _{CC} ×0.1	V	
1 Level Input Voltage	*	*	*	V _{OH}	V _{CC} ×0.9	—	—		
Rise and Fall Time	A, B, C D	*	*	tr, tf	—	—	3	ns 10 to 90% Vcc Level	
OE Pin 0 Level Input Voltage					—	—	5		
OE Pin 1 Level Input Voltage	*	*	*	V _{IL}	—	—	V _{CC} ×0.3	V	
Output Disable Time	*	*	*	V _{IH}	V _{CC} ×0.7	—	200	ns	
Output Enable Time	*	*	*	t _{PLZ}	—	—	2	ms	
Packing Unit (1)	3000pcs./reel (Φ 180)								

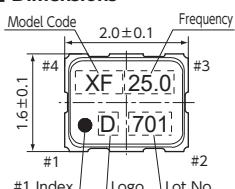
(1) Moisture prevention packing is unnecessary.

Moisture Sensitivity Level : Level1 (IPC/JEDEC J-STD-033)

Consult our sales representative for other specifications.

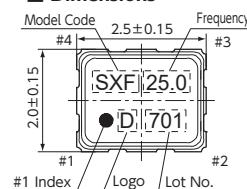
■ DSO211SXF

■ Dimensions

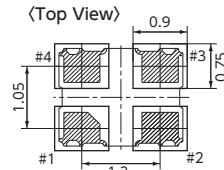


■ DSO221SXF

■ Dimensions



■ Recommended Land Pattern



■ Dimensions

Pin No.	Connection
#1	OE(Output Enable)
#2	GND
#3	Output
#4	V _{CC}

Function

#1 Input #3 Output condition

H Oscillation out

L High Z

■ Recommended Land Pattern

Top View

