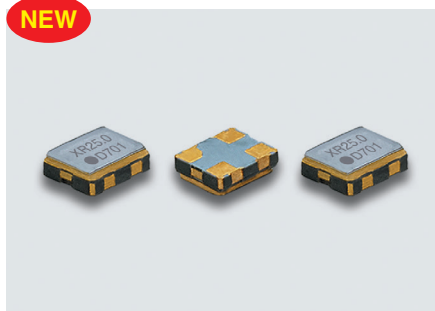


SMD Crystal Oscillators

DSO211SXR

NEW



Actual size

Features

- 2016 size, 0.7mm height, ultra miniature and lightweight
- Output Frequency: 32.768kHz
- Supply voltage: +1.8V/+2.5V/+2.8V/+3.3V
- Low current consumption: 18uA typ.
- Stable frequency variation realized by adopting an At cut resonator
- Capable of operating over a wide temperature range, from -40 to +125°C
- CMOS output
- 3-state function

Applications

- Short-range wireless modules, PC, multimedia devices, industrial measuring equipment, consumer product



[Function Code]

DSO211SXR

	A	A
A : 3.3V	A	A, Y : $\pm 100 \times 10^{-6}$
M : 3.0V	M	Z : $\pm 80 \times 10^{-6}$
B : 2.8V	B	B : $\pm 50 \times 10^{-6}$
C : 2.5V	C	C : $\pm 30 \times 10^{-6}$
D : 1.8V	D	D : $\pm 25 \times 10^{-6}$
	E	E : $\pm 20 \times 10^{-6}$

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

Standard Specification

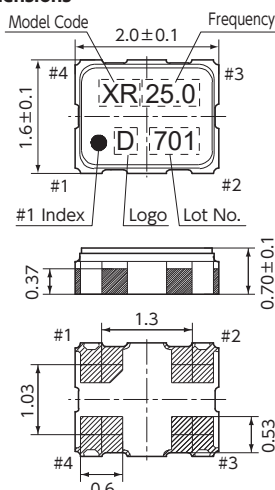
Item	Function Code		Output Frequency (kHz)	Legend	Spec.				Condition		
	Supply Voltage	Frequency tolerance			min.	typ.	max.	Unit			
Supply Voltage	A	*	*	V _{CC}	+3.0	+3.3	+3.6	V			
	M				+2.7	+3.0	+3.3				
	B				+2.6	+2.8	+3.0				
	C				+2.25	+2.5	+2.75				
	D				+1.6	+1.8	+2.0				
Frequency Tolerance (includes frequency tolerance at room temperature)	*	Y	*	f _{tot}	−100	—	+100	×10 ^{−6}	−40 to +125℃	−10 to +70℃ (Standard Operating Temperature Range)	
		Z			−80	—	+80		−40 to +110℃		
		A			−100	—	+100		−40 to +85℃		
		B			−50	—	+50		−20 to +70℃		
		C			−30	—	+30				
		D			−25	—	+25		−10 to +70℃		
E	−20	—	+20								
Current Consumption	*	*	*	I _{CC}	—	18	32	μA	No Load		
Stand-by Current (#1 pin "L" Level)	*	*	*	I _{std}	—	—	5	μA			
Load Condition	*	*	*	L _{CMOS}	—	—	15	pF			
Symmetry	*	*	*	SYM	45	50	55	%	50% V _{CC} Level		
0 Level Output Voltage	*	*	*	V _{OL}	—	—	V _{CC} ×0.1	V	10 to 90% V _{CC} Level		
1 Level Output Voltage	*	*	*	V _{OH}	V _{CC} ×0.9	—	—	V			
Rise and Fall Time	*	*	*	tr, tf	—	—	50	ns			
OE Pin 0 Level Input Voltage	*	*	*	V _{IL}	—	—	V _{CC} ×0.3	V			
OE Pin 1 Level Input Voltage	*	*	*	V _{IH}	V _{CC} ×0.7	—	—	V			
Output Disable Time	*	*	*	tPLZ	—	—	1	μs			
Output Enable Time	*	*	*	tPZL	—	—	10	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.

[mm]

Dimensions



Pin Connections

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

