

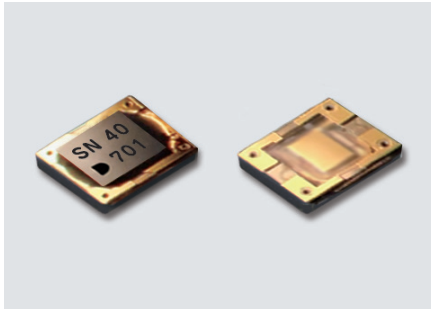


Ark.3G



SMD Crystal Oscillators

DS1008JN



Actual size □

■ Features

- 1008 size, height 0.22mm
- Unprecedented extremely low-profile package using a novel structure
- Available frequency range : 1 to 100MHz
- Low Supply Voltage : 0.9V/ 1.2V/ 1.3V/ 1.5V typ.
- 3-state function
- CMOS level output
- Available up to 100MHz by using AT cut fundamental resonator.
- Low jitter provides for high performance.

■ Applications

- Medical camera
- Wearable devices
- IoT devices
- Multimedia device



[Function Code]

DS1008JN E A

E : 1.5V	A : $\pm 100 \times 10^{-6}$
F : 1.3V	B : $\pm 50 \times 10^{-6}$
G : 1.2V	C : $\pm 30 \times 10^{-6}$
H : 0.9V	E : $\pm 20 \times 10^{-6}$

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

■ Standard Specification

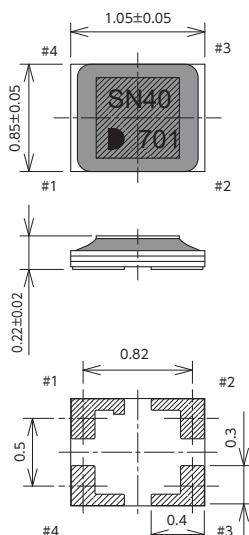
Item	Type	Function Code		Output Frequency Range (MHz)	Legend	Spec.			Condition	
		Supply Voltage	Frequency Tolerance			min.	typ.	max.		
Supply Voltage		E	*	$1 \leq f_0 \leq 100$	Vcc	1.4	1.5	1.6	V	
		F				1.2	1.3	1.4		
		G				1.1	1.2	1.3		
		H				0.8	0.9	1.0		
Frequency Tolerance (Includes frequency tolerance at room temperature.)	*		A	*	f _{tol}	—	—	± 100	ppm	-40 to +125°C -20 to +70°C (Standard Operating Temperature Range)
			B			—	—	± 50		
			C			—	—	± 30		
			E			—	—	± 20		
Current Consumption	E	*		$80 \leq f_0 \leq 100$	lcc	—	—	3.1	mA	No Load
				$50 \leq f_0 < 80$		—	—	2.7		
				$1 \leq f_0 < 50$		—	—	2.2		
	F	*		$80 \leq f_0 \leq 100$		—	—	2.8		
				$50 \leq f_0 < 80$		—	—	2.5		
				$1 \leq f_0 < 50$		—	—	2.1		
	G	*		$80 \leq f_0 \leq 100$		—	—	2.7		
				$50 \leq f_0 < 80$		—	—	2.4		
				$1 \leq f_0 < 50$		—	—	2.0		
	H	*		$80 \leq f_0 \leq 100$		—	—	2.3		
				$50 \leq f_0 < 80$		—	—	2.1		
				$1 \leq f_0 < 50$		—	—	1.8		
Stand-by Current (#1 pin "L" Level)	*	*	*	*	L std	—	—	0.02	mA	
Load Condition	*	*	*	*	L CMOS	—	—	15	pF	
Symmetry	*	*	*	*	SYM	40	50	60	%	at 50%
Rise and Fall Time	*	*	*	*	tr, tf	—	—	5	ns	10 to 90% Vcc Level
Output Enable Time	*	*	*	*	tPZL	—	—	2	ms	
Output Disable Time	*	*	*	*	tPLZ	—	—	200	ns	
OE Pin 1 Level Input Voltage	*	*	*	*	VIH	Vcc×0.8	—	—	V	
OE Pin 0 Level Input Voltage	*	*	*	*	VIL	—	—	Vcc×0.2	V	
Packing Unit (1)						3000pcs./reel(φ180)				

(1) Moisture prevention packing

Consult our sales representative for other specifications

[mm]

■ Dimensions



Pin Connection

Pin No.	Connection
#1	OE (Output Enable)
#2	GND
#3	Output
#4	Vcc

Function

#1 Input	#3 Output condition
H	Oscillation out
Open	Oscillation out
L	High Z

■ Recommended Land Pattern

〈Top View〉

