

Development of World's Smallest and Thinnest* Differential Output Crystal Oscillators (Arkh.3G Series), DS1008JC/DS1008JD/DS1008JJ/DS1008JK

July 9, 2019

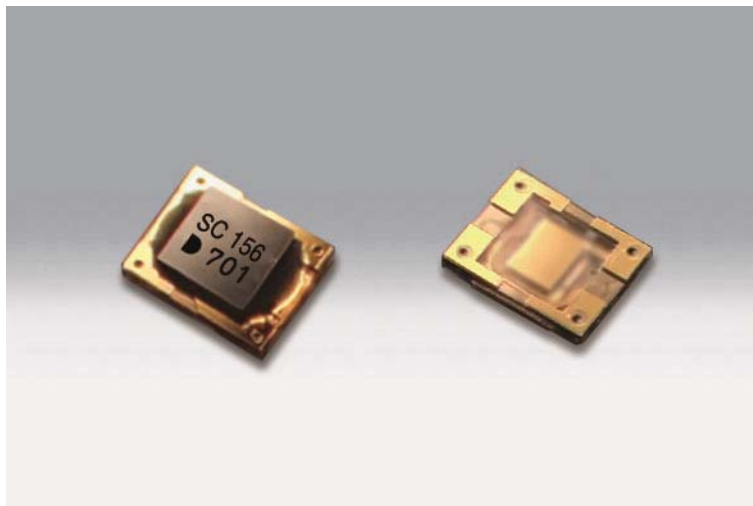
DAISHINKU CORP.

DAISHINKU CORP. (President: Sohei Hasegawa) has developed 1008-size differential output crystal oscillators, DS1008JC/DS1008JD/DS1008JJ/DS1008JK, and will start shipping samples in July.

In response to a rapid increase in communication traffic accompanied by the expansion of mobile networks and emergence of big data in recent years, various efforts have been made in research and development of optical transport devices. Digital coherent technology is one of the key drivers of those efforts. Differential output crystal oscillators have been drawing attention as devices supporting this technology. One of the most important performance factors of such devices is implementation efficiency. Downsizing an individual device is demanded to achieve higher efficiency. However, most differential output crystal oscillators in the market are 7050- and 5032-size. The most compact version is the 2520-size device sold by us. The newly developed 1008-size devices are far smaller and thinner compared to the conventional products, thereby contributing to increased implementation efficiency.

This product has been developed as part of the Arkh.3G series, which was realized by our proprietary technology. We have also completed developing a low-voltage clock crystal oscillator, DS1008JN, which operates on 1.2 V. We will expand the lineup of the Arkh.3G series to create new value for crystal devices.

* Source: survey by DAISHINKU CORP. valid as of July 8, 2019



< Features >

- Size: 1.0×0.8×0.29 mm max.
- Designed to operate with four types of differential digital signals (HD-LVDS, HCSL, LVDS, LV-PECL)
- Supply Voltage: +2.5V/+3.3V
- Low phase noise
- Non-PLL output

<Electrical specification>

Type	DS1008JC	DS1008JD	DS1008JJ	DS1008JK
Size(mm)	1.0 × 0.8 × 0.29 max.			
Frequency Range	156.25 MHz			
Supply Voltage	+3.3V	+2.5V/ +3.3V		
Output Specification	HD-LVDS	HCSL	LVDS	LV-PECL
Frequency Tolerance	± 100 × 10 ⁻⁶			
Operating Temperature Range	-40 to +85°C			

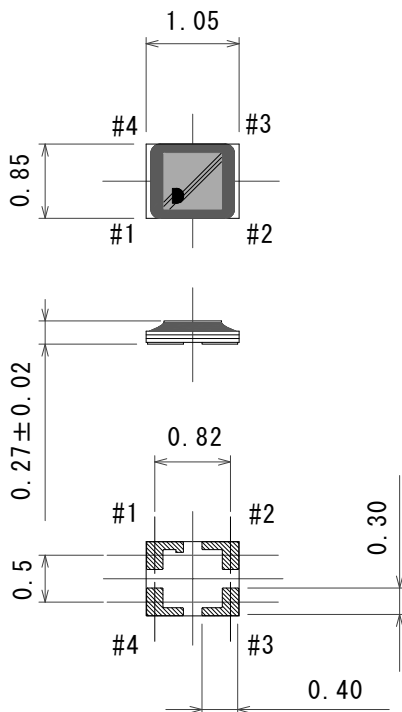
Consult our sales representative for other specifications.

<Main applications>

Optical Network Equipment

<Dimensions>

[mm]



Pin Connections

Pin No.	Connections
#1	GND
#2	OutputN
#3	Output
#4	V _{CC}

Tolerance: ±0.05

Unit: mm

■ Recommended Land Pattern

