

GENERAL DESCRIPTION

The AD246 is a compact, inexpensive clock driver that can be used to obtain the required clock from a single 15 V supply. The circuit shown in Figure 1 (essentially an AD246) can operate at least 32 AD204s at the rated minimum supply voltage of 14.25 V and one additional isolator can be operated for each 40 mV increase in supply voltage up to 15 V.

A supply bypass capacitor is included in the AD246, but if many AD204s are operated from a single AD246, an external bypass connector should be used with a value of at least 1 μF for every five isolators used. Place the capacitor as close as possible to the clock driver.

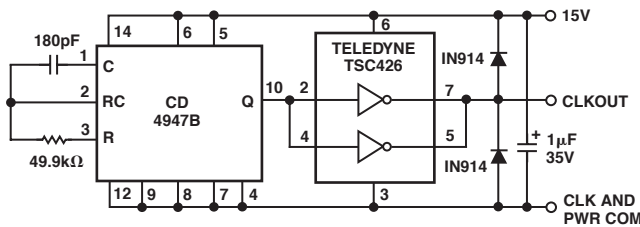


Figure 1. Clock Driver

AD246 SPECIFICATIONS

(Typical @ 25°C and $V_S = 15\text{ V}$, unless otherwise noted.)

Model	AD246JY	AD246JN
OUTPUT*		
Frequency	25 kHz Nominal	25 kHz Nominal
Voltage	15 V p-p Nominal	15 V p-p Nominal
Fan Out	32 max	32 max
POWER SUPPLY REQUIREMENTS		
Input Voltage	15 V \pm 5%	15 V \pm 5%
Supply Current		
Unloaded	35 mA	35 mA
Each AD204	2.2 mA	2.2 mA
Adds 1 mA		
Load on AD204		
+ V_{ISO} or		
- V_{ISO} Adds	0.7 mA	0.7 mA

*The high current drive will not support a short to ground. Specifications are subject to change without notice.

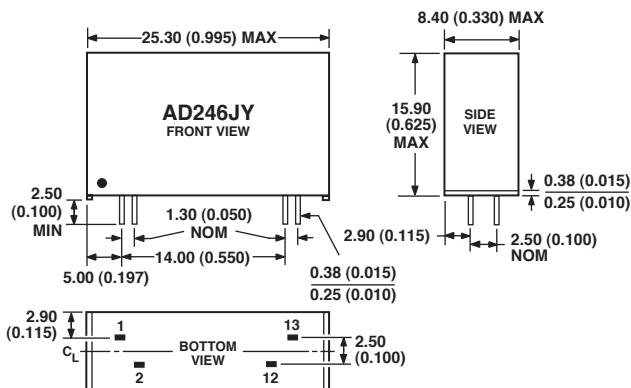
AD246 Pin Designations

Pin (Y)	Pin (N)	Function
1	12	15 V Power In
2	1	Clock Output
12	14	Common
13	24	Common

OUTLINE DIMENSIONS

AD246JY Package

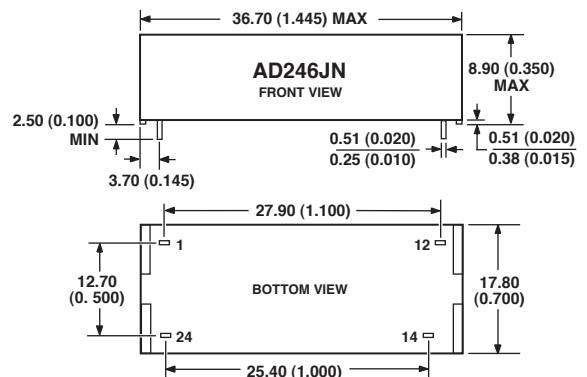
Dimensions shown in inches and (millimeters)



CONTROLLING DIMENSIONS ARE IN MILLIMETERS; INCH DIMENSIONS (IN PARENTHESES) ARE ROUNDED-OFF MILLIMETER EQUIVALENTS FOR REFERENCE ONLY AND ARE NOT APPROPRIATE FOR USE IN DESIGN

AD246JN Package

Dimensions shown in inches and (millimeters)



CONTROLLING DIMENSIONS ARE IN MILLIMETERS; INCH DIMENSIONS (IN PARENTHESES) ARE ROUNDED-OFF MILLIMETER EQUIVALENTS FOR REFERENCE ONLY AND ARE NOT APPROPRIATE FOR USE IN DESIGN

REV. 0

Information furnished by Analog Devices is believed to be accurate and reliable. However, no responsibility is assumed by Analog Devices for its use, nor for any infringements of patents or other rights of third parties that may result from its use. No license is granted by implication or otherwise under any patent or patent rights of Analog Devices.

