

Clock Driver

AD246

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 V₈ = 15 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)



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AD246JN Package

Dimensions shown in inches and (millimeters)



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One Technology Way, P.O. Box 9106, Norwood, MA 02062-9106, U.S.A. Tel: 781/329-4700 www.analog.com Fax: 781/326-8703 © Analog Devices, Inc., 2002

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