AC coupled, the internal clamps are employed. The outputs can drive both AC and DC coupled 150 Ω loads.

It is designed to be compatible with most Digital Analog Converters (DAC) embedded in most video processors.

SOIC

Features

- Three 6th Order High Definition 30 MHz Filter
- Internally Fixed Gain = 6 dB
- Transparent Input Clamping for Each Channel
- DC or AC Coupled Inputs
- DC or AC Coupled Outputs
- Integrated Level Shifter
- Operating Voltage +5 V
- Available in SOIC−8 Package
- These are Pb−Free Devices

Applications

- Digital Set−Top Box
- DVD and Video Players
- HDTV
- Video−On−Demand (VOD)

March, 2009

PIN FUNCTION AND DESCRIPTION

Pin	Name	Type	Description
			–
			–
			–
			–
			–
			–

ATTRIBUTES

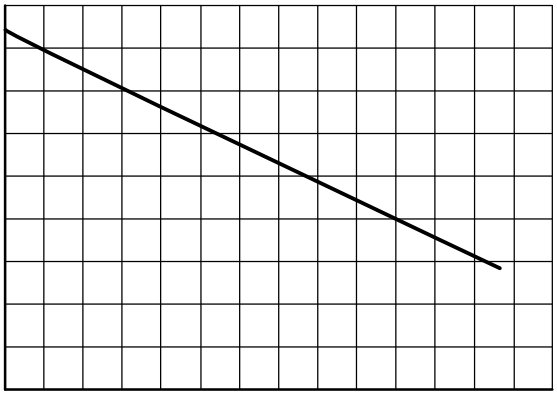
Characteristics	Value

MAXIMUM RATINGS

Parameter	Symbol	Rating	Unit
		– ≤ ≤	
		≤ ≤ –	
		≤	
			°
		–	°
		–	°
– –	θ		°

Maximum Power Dissipation

The maximum power that can be safely dissipated is limited by the associated rise in junction temperature. For the plastic packages, the maximum safe junction temperature is 150° . If the maximum is exceeded momentarily, proper circuit operation will be restored as soon as the die temperature is reduced. Leaving the device in the “overheated” condition for an extended period can result in device burnout. To ensure proper operation, it is important to observe the derating curves.



–

°

Figure 2. Power Dissipation vs Temperature

NCS2563

TYPICAL CHARACTERISTICS

° Ω μ − μ − Ω

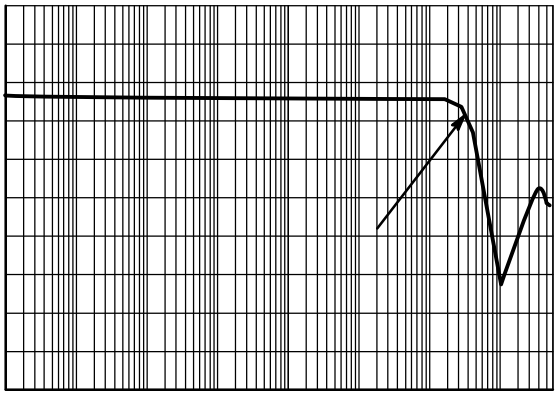


Figure 3. Gain vs. Frequency

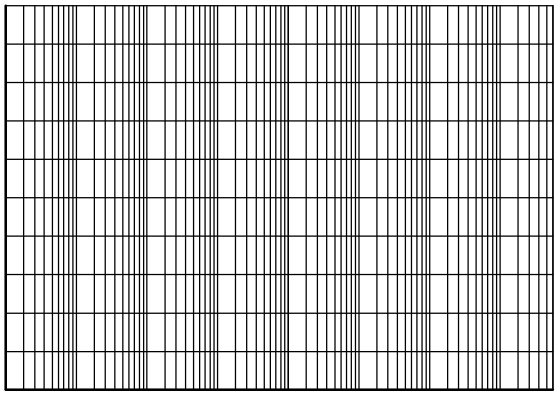


Figure 4. Attenuation

Figure 5. Flatness Bandwidth 0.1 dB

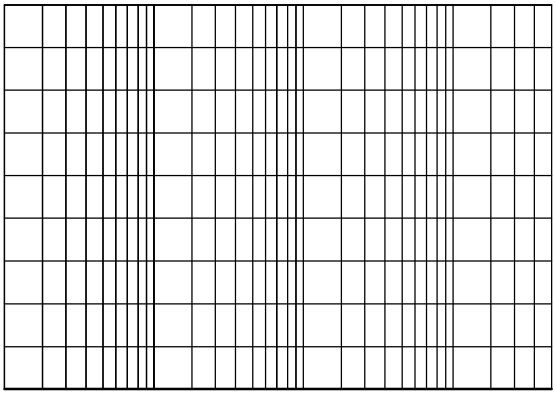


Figure 6. PSRR vs. Frequency (No Bypass Capacitor)

Figure 7. Crosstalk0 0 9 245.76 303lS 1 041.52 0 cm 0 0 mB lhS

TYPICAL CHARACTERISTICS

° Ω µ – µ – Ω

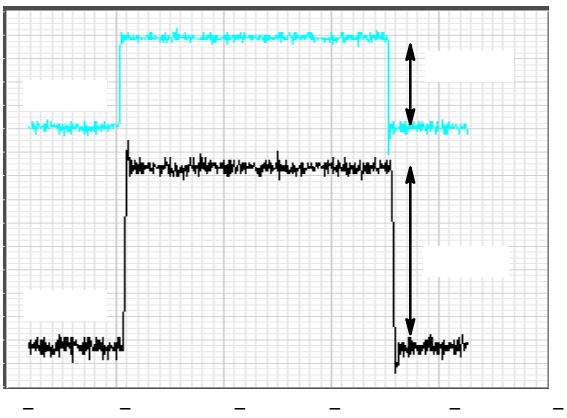


Figure 8. Small Signal Step Response
$T_r = T_f$ = 1 ns

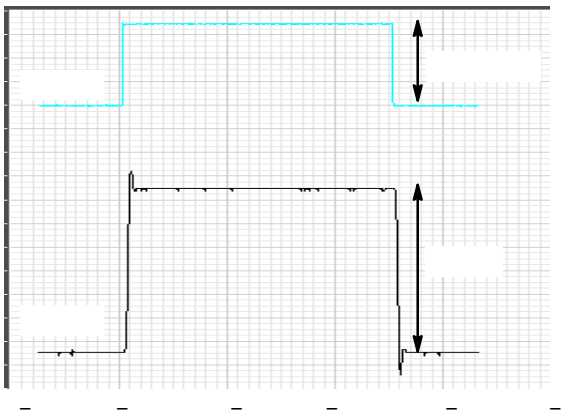


Figure 9. Large Signal Step Response
$T_r = T_f$ = 1.0 ns

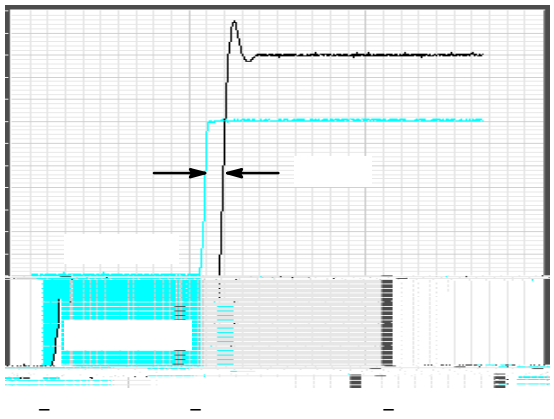


Figure 10. Propagation Delay vs. Time

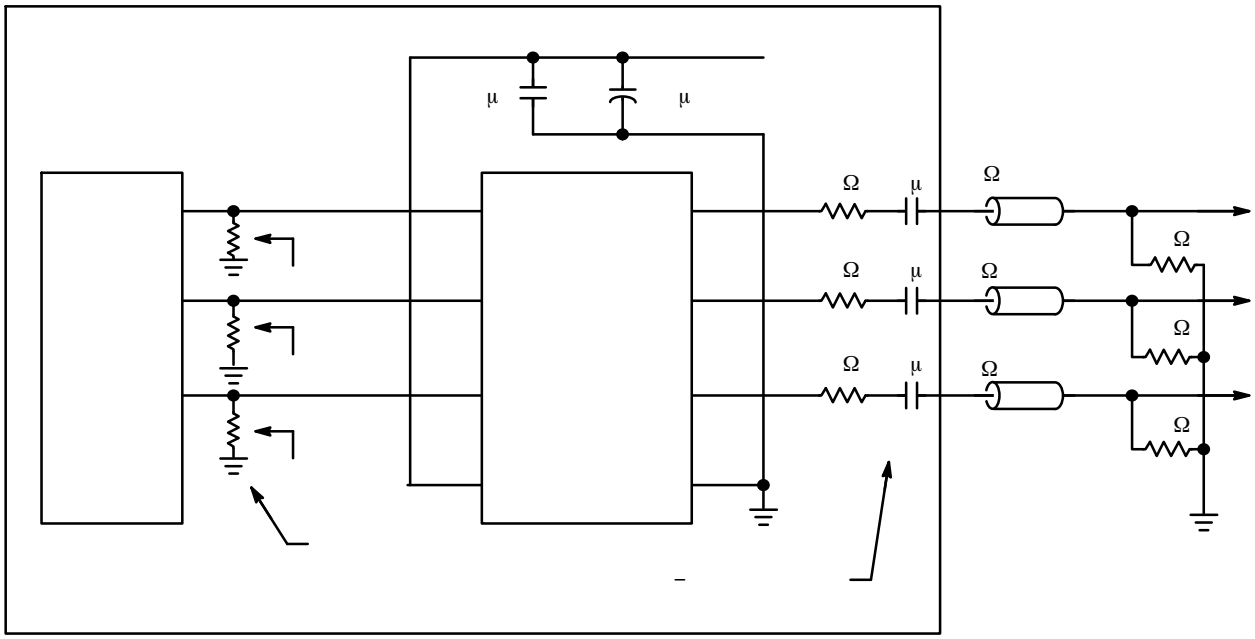
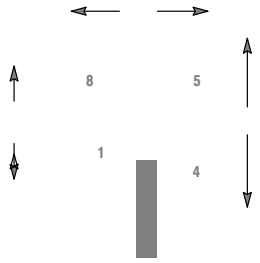
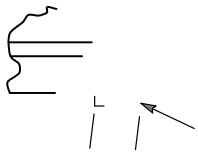


Figure 12. Typical Application Circuit

SOIC 8 NB
CASE 751−07
ISSUE AK

DATE 16 FEB 2011





SEATING
PLANE