SONY CX23010/23060

Dual 10 bit, 50 KHz, Multiplexed A/D + D/A

Description:

The CX23010/CX23060 are the 10 bit, 50 kHz CMOS A/D, D/A Converters for Auido digital signal processing, using a coarse-fine integration technique. Both Analog to Digital and Digital to Analog Conversions are capable with selecting the mode. It can be separated into 2 blocks. One is a digital block includes:

- Digital block includes:
  - — A digital limiter
  - — A counter
  - — A timing generation circuit
- Analog block includes:
  - — A current source
  - — An operational amplifier
  - — A comparator
  - — A multiplexer (2-channel)

Features:

- A Single Power Supply: V_{DD} 5V
- Minimum Number of External Parts required (Around One-third Compared with our Current A/Ds)
- Two Channel Audio A/D, D/A Processing (L and R Channels)
- 2's Complementary Digital Code is employed
- Low Power Dissipation (Less than 50 mW)

Applications:

- Digital Audio Signal Processing
- PCM Audio Processing
- Telecommunications Digitizing
- Computer Interface System

Structure Silicon gate CMOSIC:

Absolute Maximum Ratings (T_a = 25°C)

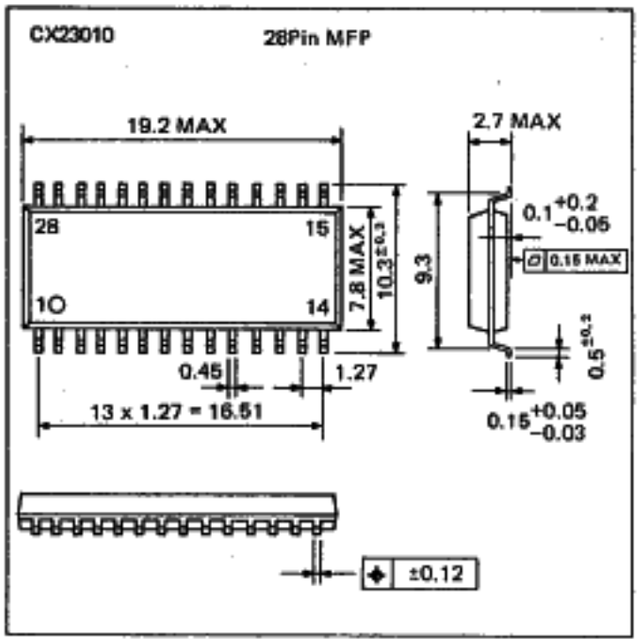
• Power Supply voltage:	V_{DD}	−0.3 to+7	V
• Analog Input Voltage:	V_{IN}	−0.3 to V_{DD} + 0.3	V
• Operating Temperature:	T_{opr}	−20 to +75	°C
• Storage Temperature:	T_{stg}	−55 to +150	°C
• Allowable Power Dissipation:	P_D	650 mW for CX23010	
	P_D	800 mW for CX23060	

Recommended Operating Conditions

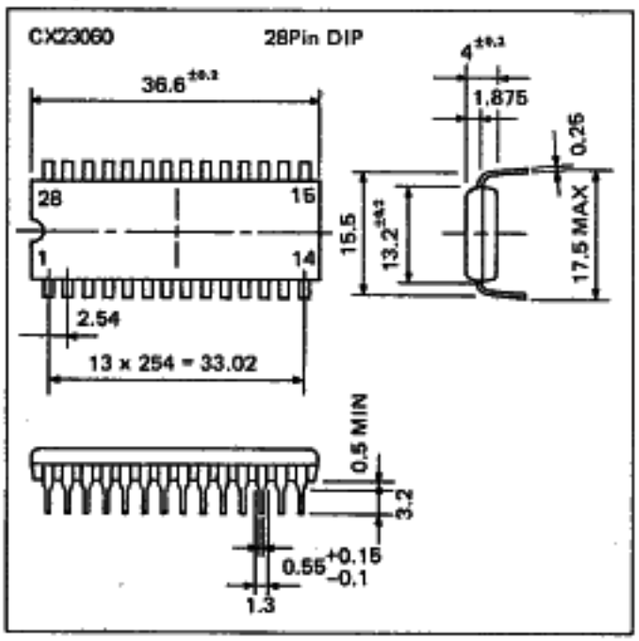
(1) AV_{DD}, DV_{DD} 4.5 to 5.5 V

(2) $AV_{DD} \leqq DV_{DD}$ +0.5 V

Package outline Unit: mm



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