
PRODUCT INFORMATION

Vol.122

Three-Line Comb Filter for TV and VCR Applications Developed

Device that contributes to miniaturization and improved image quality in video equipment

LA76600M

Overview

Along with larger screen sizes, modern video equipment such as TV sets and VCRs must provide the high image quality required to support high image quality media such as digital broadcasts and DVD players. Technology for separating a composite video signal into Y and C (luminance and chrominance) signals with high precision is indispensable for achieving this improved image quality in video equipment.

To respond to these needs, SANYO has now developed the LA76600M three-line comb filter for high-precision Y/C (luminance/chrominance) signal separation. This newly-developed IC is a multi-chip package product that combines two chips, a bipolar signal-processing IC and a CCD delay line, in a single package. This allows the anti-aliasing filter that removes noise from the MOS IC to be integrated on the bipolar chip, thus obviating the need for the external filter that was previously required. Additionally, SANYO has adopted a new signal-processing algorithm it developed itself to achieve the industry's highest level of image quality. These technologies and features mean that this device can implement systems that achieve both simpler circuit structures and higher performance.

Features

- Reduced dot and cross color interference
- Built-in front end low-pass filter and clock exclusion low-pass filter.
- Two-input switch
- Composite video output/S-video output switch
- Sync tip clamp circuit

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Specifications

Functions: Y/C separation for color TV sets, Y/C separation for VCR decks (NTSC specifications for both system types)

Maximum Ratings at Ta = 25°C

Parameter	Symbol	Conditions	Ratings	Unit
Maximum supply voltage	Vcc max		7.0	V
Allowable power dissipation	PD max	Ta ≤ 75°C	500	mW
Operating temperature	Topr		-10 to +75	°C

Recommended Operating Conditions at Ta = 25°C

Parameter	Symbol	Conditions	Ratings	Unit
Recommended operating voltage	Vcc		5.0	V
Allowable operating voltage range	Vcc opg		4.8 to 5.2	V

Sample Availability

The LA76600M will be available in sample quantities in October 2001 and in production quantities (500,000 units/month) by late 2002.

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