



SET-TOP BOX FILTERS

These multichannel post filters contain all the filtering and buffering required to interface a digital video encoder directly to a 75 ohm Composite and Y/C output. Most oversampled encoders do not provide Sinx/x correction and introduce significant DC offset due to operation from a single supply rail. In addition the output impedance of voltage mode DACs are subject to large tolerances which can introduce large gain variations when loaded by external filters.

The filters are Sinx/x corrected and available either with or without group delay correction. In addition they have a high input impedance which reduces significantly the gain variation of the encoder and are DC coupled with offset adjustment.

FEATURES:

- Two Composite and one Y/C output from one Y/C input.
- Group delay equalisation provided on AH1013.
- Accurate Sinx/x correction for 27 MHz sampling.
- Designed for Philips video encoders (SAA7185, SAA7199).
- Excellent Differential Gain and Phase.
- DC coupling eliminates tilt problems.

Filters available for Analog Devices, Brooktree, Harris, Raytheon etc on request.

	AH1013	AH1053
Filter Shape	Lowpass	Lowpass
Passband Shape	Sinx/x	Sinx/x
Sampling Frequency	27 MHz	27 MHz
End Of Passband	6 MHz	6 MHz
Passband Amplitude Ripple	\pm 0.5 dB from DC to 5 MHz \pm 0.75 dB from 5 MHz to 7 MHz with 27 MHz Sinx/x equalisation	\pm 0.5 dB from DC to 5 MHz \pm 0.75 dB from 5 MHz to 7 MHz with 27 MHz Sinx/x equalisation
Start Of Stopband	21 MHz	21 MHz
Group Delay Ripple	<u>+</u> 5 ns	+ 20 ns
Group Delay Bandwidth	5 MHz	5 MHz
Gain	$0 \text{ dB} \pm 0.25 \text{ dB}$ at 100 kHz	$0 \text{ dB} \pm 0.25 \text{ dB}$ at 100 kHz
Differential Phase	0.2 degrees	0.2 degrees
Differential Gain	0.2 %	0.2 %
Supply Voltages	\pm 5v to \pm 12v	\pm 5v to \pm 12v
Impedance	75 ohms	75 ohms
Temperature Range	0°C to 70°C	0°C to 70°C
Package	DR00144A	DR00144A

PACKAGE DETAIL

