

OBSERVE ELECTROSTATIC



# SE121-00

## 4-CHANNEL OVERSAMPLED POST FILTER

The SE121-00 is a surface mountable four channel video output filter designed to provide all the filtering and buffering requirements for the Analog Devices ADV7170 and ADV7171 encoders. Use of high performance video operational amplifiers gives minimal differential gain and phase distortion with the capability of driving up to  $\pm 2.5V$  into  $75\Omega$  loads.

### Other features

- 4 independent filtered channels for RGB and Alpha or dual S-video and dual composite.
- accurate factory set gain of 0 dB (6 dB optional - order SE121-60)
- $75\Omega$  output termination resistors provided
- Flat passband response - ADV encoder incorporates  $\sin x/x$  correction
- high input impedance - makes interfacing easy
- DC coupling eliminates tilt problems associated with AC coupling
- DC offset of encoder output (due to single rail operation) is corrected to bring blanking level near zero
- 24-pin surface mount DIL package

### FILTER SPECIFICATION FOR EACH CHANNEL

<i>End of Passband</i>	5.5 MHz
<i>Passband shape</i>	flat
<i>Sampling frequency</i>	-
<i>Amplitude ripple</i>	$\pm 0.1$ dB to 5.5 MHz, $\pm 0.2$ dB to 6 MHz
<i>Gain</i>	0 dB $\pm 0.2$ dB
<i>Group Delay ripple</i>	< 10 ns to 5.5 MHz
<i>Start of stopband</i>	21 MHz
<i>Stopband rejection wrt 100 kHz</i>	> 30 dB
<i>Input impedance</i>	100 k $\Omega$ typical
<i>Output impedance</i>	$75\Omega$
<i>Supply voltage</i>	$\pm 5V$
<i>Supply current</i>	25 mA per rail (typical)
<i>Aqueous Washable</i>	Yes
<i>Package</i>	DR00134B

# PACKAGE DETAIL

