



# SE110-00

## SET-TOP VIDEO POST FILTER

The SE110-00 is a surface mountable active hybrid module designed to interface Philips SAA7185 series digital video encoders to 75 $\Omega$  composite (CMPS), Luma (Y) and Chroma (C) outputs. Use of high performance operational amplifiers ensures minimal differential phase/gain errors and the ability to drive ± 2.5V into 75 $\Omega$  loads.

#### **Other features**

- Drives two composite outputs and one Y/C output
- accurate factory set gain of 0 dB (6 dB optional order SE110-60)
- $75\Omega$  output termination resistors provided
- sinx/x correction for 27 MHz sampling
- 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 j-lead surface mount package

#### FILTER SPECIFICATION FOR EACH CHANNEL

| End of Passband                | 6.0 MHz                           |
|--------------------------------|-----------------------------------|
| Passband shape                 | $\sin x/x$                        |
| Sampling frequency             | 27 MHz                            |
| Amplitude ripple <sup>1</sup>  | $\pm0.5~\text{dB}$ to 6.0 MHz,    |
| Gain                           | $0 \text{ dB} \pm 0.2 \text{ dB}$ |
| Group Delay ripple             | < 10 ns                           |
| Start of stopband              | 21 MHz                            |
| Stopband rejection wrt 100 kHz | > 40 dB (with sinx/x)             |
| Input impedance                | 100 k $\Omega$ typical            |
| Output impedance               | 75Ω                               |
| Supply voltage                 | $\pm 5V$                          |
| Supply current                 | 25 mA per rail (typical)          |
| Aqueous Washable               | Yes                               |
| Package                        | DR00144A                          |

<sup>1</sup> measured against sinx/x predistortion curve

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### PACKAGE DETAIL

