

# OB SERIES

## VIDEO OVERSAMPLING SMD FILTERS

- Surface Mount Package
- Selectable Sinx/x
- Small size, low cost
- Luminance and Chrominance versions

This range of analogue filters has been designed for use in conjunction with a half band interpolating/decimating filter such as the TRW2242 or with the many encoder chips available which employ digital filtering and an output D to A converter. This type of digital filtering has good attenuation between the frequencies of  $F_s/4$  and  $3F_s/4$  where  $F_s$  is the Master Clock rate. When the normal clock rate of 27 MHz is used for the luminance channel, the signal can be expected to have insignificant energy between 6.75 MHz and 20.25 MHz.

In order to preserve the integrity of the signal these filters have good amplitude and group delay characteristics in the passband that meet requirements of CCIR601, but due to the above considerations do not have significant attenuation below 21 MHz.

<i>Order code</i>	OBYPB	OBCPB
<i>Filter Shape</i>	Lowpass	Lowpass
<i>Impedance</i>	75 $\Omega$	75 $\Omega$
<i>Sinx/x correction</i>	No	No
<i>Sampling Freq.</i>	27.0 MHz	13.5 MHz
<i>End of Passband</i>	5.75 MHz	2.75 MHz
<i>Amp. ripple to 5.50 MHz</i>	< 0.05 dB	< 0.05 dB
<i>to 5.75 MHz</i>	< 0.1 dB	< 0.1 dB
<i>G.D. ripple</i>	< 6 ns	< 12 ns
<i>Start of stopband</i>	21.5 MHz	10.75 MHz
<i>Stopband atten. wrt 100 kHz</i>	> 40 dB	> 40 dB
<i>Delay time nom. at 200 kHz</i>	58 ns Flat	116 ns Flat
	55 ns Sinx/x	110 ns Sinx/x
<i>Aqueous Washable</i>	Yes	Yes
<i>SMD Reflow Limitations</i>	refer to Data Sheet Fara309	
<i>Package</i>	DR00326A	DR00326A

# PACKAGE DETAIL

