

# OB SERIES

## VIDEO OVERSAMPLING SMD FILTERS

- Surface Mount Package
- Flat or Sinx/x versions
- 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.

Order code	OBYSB	OBYFB	OBCSB	OBCFB
Filter Shape	Lowpass	Lowpass	Lowpass	Lowpass
Impedance	75 $\Omega$	75 $\Omega$	75 $\Omega$	75 $\Omega$
Sinx/x correction	Yes	No	Yes	No
Sampling Freq.	27.0 MHz	27.0 MHz	13.5 MHz	13.5 MHz
End of Passband	5.75 MHz	5.75 MHz	2.75 MHz	2.75 MHz
Amp. ripple to 5.5 MHz	< 0.05 dB	< 0.05 dB	< 0.05 dB	< 0.05 dB
to 5.75 MHz	< 0.1 dB	< 0.1 dB	< 0.1 dB	< 0.1 dB
G.D. ripple	< 6 ns	< 6 ns	< 12 ns	< 12 ns
Start of stopband	21.5 MHz	21.5 MHz	10.75 MHz	10.75 MHz
Stopband atten. wrt 100 kHz	> 40 dB	> 40 dB	> 40 dB	> 40 dB
Delay time nom. at 200 kHz	55 ns	58 ns	110 ns	116 ns
Aqueous Washable	Yes	Yes	Yes	Yes
SMD Reflow Limitations	refer to Data Sheet Fara309			
Package	DR00325A			

# PACKAGE DETAIL

