

## **CCIR REC.601 FILTERS** SINGLE IN LINE

Designed to meet the full requirements of REC ITU-R BT601-5 Part B to suppress aliasing and to reconstruct signals in 4:2:2 YUV format A-D and D-A video interface applications operating at a sampling rate of 18.00 MHz for the luminance (Y) channel and 9.00 MHz for the Colour Difference (U and V) channels, as used in the 16 x 9 wide screen format.

Using specially written software and careful attention to component layout, the very stringent parameters for pre and post filtering have been achieved in a Single In Line encapsulated module.

	PRE FILTER	POST FILTER		
LUMINANCE	L601F0767	L601S0767		
End Of Passband	7.67 MHz	5.75 MHz		
Passband Amplitude Ripple	0.05 dB to 7.33 MHz 0.1 dB to 7.67 MHz	0.05 dB to 7.33 MHz <sup>1</sup> 0.1 dB to 7.67 MHz <sup>1</sup>		
> 12 dB wrt 100 kHz at	9.00 MHz	$9.00~\mathrm{MHz}^{-1}$		
> 40 dB wrt 100 kHz at	10.67 MHz	10.67 MHz		
Group Delay Ripple wrt delay at 200 kHz	$\pm$ 3 ns to 7.67 MHz	$\pm$ 3 ns to 7.67 MHz		
Insertion Loss at 100 kHz	< 1.5 dB	< 4.5 dB		
Delay Time at 200 kHz	570 ns <u>+</u> 5 ns	568 ns <u>+</u> 5 ns		
Impedance	75 ohms	75 ohms		
Aqueous Washable	No	No		
Package	DR00075B	DR00075B		
<sup>1</sup> measured against sinx/x roll off for a 18.0 MHz sampling frequency.				

COLOUR DIFFERENCE	L601F0367	L601S0367
End Of Passband	3.67 MHz	3.67 MHz
Passband Amplitude Ripple	0.1 dB to 3.67 MHz	0.1 dB to 3.67 MHz $^2$
> 6 dB wrt 100 kHz at	4.5 MHz	$4.5$ MHz $^2$
> 40 dB wrt 100 kHz at	5.33 MHz	5.33 MHz
Group Delay Ripple wrt delay at 200 kHz	<u>+</u> 6 ns to 3.67 MHz	$\pm$ 6 ns to 3.67 MHz
Insertion Loss at 100 kHz	< 1.5 dB	< 4.5 dB
Delay Time at 200 kHz	1125 ns $\pm$ 5 ns	1096 ns <u>+</u> 5 ns
Impedance	75 ohms	75 ohms
Aqueous Washable	No	No
Package	DR00075B	DR00075B

<sup>&</sup>lt;sup>2</sup> measured against sinx/x roll off for a 9.0 MHz sampling frequency.

## PACKAGE DETAIL

