

CCIR REC.601 FILTERS

SINGLE IN LINE

Designed to meet the full requirements of REC ITU-R BT601-5 Part A for 4:2:2 studio systems, these CCIR Rec.601 filters are for use in Y.U.V. format Component processing.

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, designed to meet UL94V-0.

The latest state-of-the-art network analysers are used to align the filters and to ensure the highest quality control in order to meet the specifications. This range also provides integer number of clock cycle between luminance and chrominance filters with reconstruction delay accounted for to assist in equalisation of delay between channels.

	PRE FILTER	POST FILTER
LUMINANCE	ULF	ULS
End Of Passband	5.75 MHz	5.75 MHz
Passband Amplitude Ripple > 12 dB wrt 100 kHz at	0.05 dB to 5.5 MHz 0.1 dB to 5.75 MHz 6.75 MHz	$0.05 \text{ dB to } 5.5 \text{ MHz}^{-1}$ $0.1 \text{ dB to } 5.75 \text{ MHz}^{-1}$ 6.75 MHz^{-1}
> 40 dB wrt 100 kHz at	8.0 MHz	8.0 MHz
Group Delay Ripple wrt delay at 200 kHz	\pm 3 ns to 5.75 MHz	\pm 3 ns to 5.75 MHz
Insertion Loss at 100 kHz	< 1.5 dB	< 4.5 dB
Delay Time at 200 kHz	760 ns <u>+</u> 5 ns	758 ns <u>+</u> 5 ns
Impedance	75 ohms	75 ohms
Aqueous Washable	Yes	Yes
Package	DR00075B	DR00075B
1	II	

¹ measured against sinx/x roll off for a 13.5 MHz sampling frequency.

COLOUR DIFFERENCE	UCF	UCS
End Of Passband	2.75 MHz	2.75 MHz
Passband Amplitude Ripple	0.1 dB to 2.75 MHz	0.1 dB to 2.75 MHz $^{\rm 2}$
> 6 dB wrt 100 kHz at	3.375 MHz	$3.375\mathrm{MHz}^{2}$
> 40 dB wrt 100 kHz at	4.0 MHz	4.0 MHz
Group Delay Ripple wrt delay at 200 kHz	\pm 6 ns to 2.75 MHz	\pm 6 ns to 2.75 MHz
Insertion Loss at 100 kHz	< 1.5 dB	< 4.5 dB
Delay Time at 200 kHz	1500 ns \pm 5 ns	1461 ns <u>+</u> 5 ns
Impedance	75 ohms	75 ohms
Aqueous Washable	Yes	Yes
Package	DR00075B	DR00075B

² measured against sinx/x roll off for a 6.75 MHz sampling frequency.

PACKAGE DETAIL

Tel: + 44 (0)1782 661501 Fax: + 44 (0)1782 630101 Email: sales@faradaytech.co.uk Web site: http://www.faradaytech.co.uk Oct-05(A)

