

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.

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

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

| | UCF | UCS |
|--|--------------------|---------------------------------|
| COLOUR DIFFERENCE | UCF | UCS |
| <i>End Of Passband</i> | 2.75 MHz | 2.75 MHz |
| <i>Passband Amplitude Ripple</i> | 0.1 dB to 2.75 MHz | 0.1 dB to 2.75 MHz ² |
| > 6 dB wrt 100 kHz at | 3.375 MHz | 3.375 MHz ² |
| > 40 dB wrt 100 kHz at | 4.0 MHz | 4.0 MHz |
| <i>Group Delay Ripple wrt delay at 200 kHz</i> | ± 6 ns to 2.75 MHz | ± 6 ns to 2.75 MHz |
| <i>Insertion Loss at 100 kHz</i> | < 1.5 dB | < 4.5 dB |
| <i>Delay Time at 200 kHz</i> | 1500 ns ± 5 ns | 1461 ns ± 5 ns |
| <i>Impedance</i> | 75 ohms | 75 ohms |
| <i>Aqueous Washable</i> | Yes | Yes |
| <i>Package</i> | DR00075B | DR00075B |

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

PACKAGE DETAIL

Faraday Technology Ltd.
Croft Road Industrial Estate,
Newcastle, Staffordshire
ST5 0QZ. England.
Fara210d

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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)

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Faraday Technology Ltd.
Croft Road Industrial Estate,
Newcastle, Staffordshire
ST5 0QZ, England.
Fara210d

Tel: + 44 (0)1782 661501
Fax: + 44 (0)1782 630101
Email: sales@faradaytech.co.uk
Web site: <http://www.faradaytech.co.uk>
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