

# LOW COST HDTV FILTERS

## HF SERIES

The HF range of low cost HDTV filters are available in a choice of miniature packages and give near SMPTE 274M performance suitable for single pass or monitor applications.

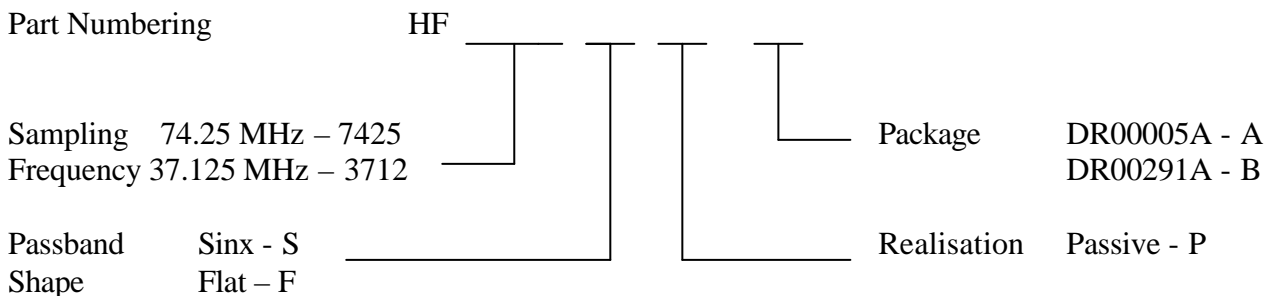
- Aqueous washable
- Ideal for monitor outputs
- SIL or SMD package
- Near SMPTE 274M performance
- Pre and Post, Luminance and Chrominance filters
- Integer N<sup>0</sup> of clock delays between Luminance and Chrominance Filters

| Filter Type               | HF7425FP*  | HF3712FP*                                      | HF7425SP*   | HF3712SP*  |
|---------------------------|--|--|---|--|
| Filter Shape              | Lowpass  | Lowpass  | Lowpass   | Lowpass  |
| Passband Shape            | Flat   | Flat   | Sinx/x  | Sinx/x   |
| Sampling Frequency        | 74.25 MHz  | 37.125 MHz                                     | 74.25 MHz   | 37.125 MHz   |
| Insertion Loss at 100 kHz | < 1.0 dB   | < 1.0 dB                                       | < 5.0 dB  | < 5.0 dB   |
| End Of Passband           | 29.7 MHz   | 14.85 MHz                                      | 29.7 MHz  | 14.85 MHz  |
| Amplitude Ripple          | < 0.1 dB to 29.0 MHz<br>< 0.15 dB to 29.7 MHz                                    | < 0.1 dB to 14.5 MHz<br>< 0.15 dB to 14.85 MHz | < 0.2 dB <sup>1</sup> to 29.0 MHz<br>< 0.25 dB <sup>1</sup> to 29.7 MHz                                 | < 0.2 dB <sup>2</sup> to 14.5 MHz<br>< 0.25 dB <sup>2</sup> to 14.85 MHz |
| > 12 dB Attenuation @     | 37.400 MHz   | 18.563 MHz                                     | 37.400 MHz <sup>1</sup>   | 18.563 MHz <sup>2</sup>  |
| > 40 dB Attenuation @     | 44.550 MHz   | 22.275 MHz                                     | 44.550 MHz  | 22.275 MHz   |
| Start Of Stopband         | 54.200 MHz   | 27.100 MHz                                     | 54.200 MHz  | 27.100 MHz   |
| Stopband Attenuation      | > 50 dB  | > 50 dB  | > 50 dB   | > 50 dB  |
| Stopband Measured to      | 100 MHz  | 100 MHz  | 100 MHz   | 100 MHz  |
| Group Delay Ripple        | <±4.5 ns to 20.0 MHz<br><±6.4 ns to 29.7 MHz                                     | <±8.0 ns to 10.0 MHz<br><±12.0 ns to 14.8 MHz  | <±4.5 ns to 20.0 MHz<br><±6.4 ns to 29.7 MHz  | <±8.0 ns to 10.0 MHz<br><±12.0 ns to 14.8 MHz                            |
| Delay Time at 200 kHz     | Integer N <sup>0</sup> of clock delays between Luminance and Chrominance Filters |  | Integer N <sup>0</sup> of clock delays + reconstruction delay between Luminance and Chrominance Filters |  |
| Impedance                 | 75 ohms  | 75 ohms  | 75 ohms   | 75 ohms  |
| Temperature Range         | 0°C to 70°C  | 0°C to 70°C                                    | 0°C to 70°C   | 0°C to 70°C  |
| SMD Reflow Limitations    | refer to Data Sheet Fara309  |  |   |  |
| Aqueous Washable          | Yes  | Yes  | Yes   | Yes  |

<sup>1</sup> Measured against sinx/x roll off for a sampling frequency of 74.25 MHz

<sup>2</sup> Measured against sinx/x roll off for a sampling frequency of 37.125 MHz

### Part Numbering



Example part number HF7425SPA is a passive, luminance, sinx/x corrected for a S.F. of 74.25 MHz packaged in a 11 pin SIL as DR00005A

