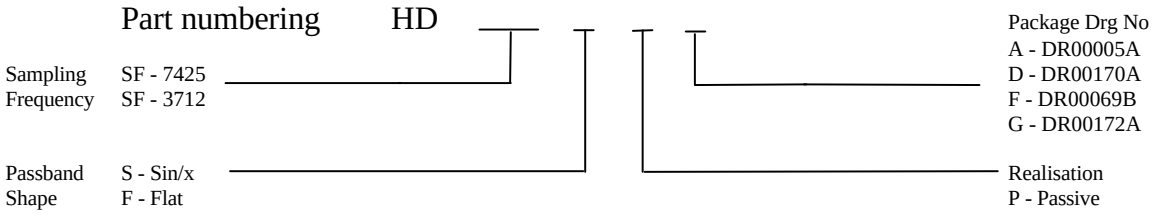
HD SERIES HDTV FILTERS

ITU 709 (1250/50)

- ITU 709 (1250/50) compliant
- pin SIL package
- Miniature space saving package
- Aqueously washable versions available
- Pre and Post Luminance and Chrominance filters
- Integer N° of clock delays between Luma and Chroma filters

Type Number	HD7425FPA	HD7425SPA	HD3712FPA	HD3712SPA
Impedance (ohms)	75	75	75	75
Filter Shape	Lowpass	Lowpass	Lowpass	Lowpass
Passband Shape	Flat	Sinx/x	Flat	Sinx/x
Sampling Frequency (S.F)	74.25 MHz	74.25 MHz	37.125 MHz	37.125 MHz
Insertion loss at 100 kHz	< 1.5 dB	< 4.5 dB	< 1.5 dB	< 4.5dB
End of Passband	29.7 MHz	29.7 MHz	14.5 MHz	14.5 MHz
Amplitude ripple (dB) *(wrt 100 kHz)*	< ± 0.01 at 100 kHz < ± 0.12 at 28.2 MHz < -1.0 at 29.7 MHz	< ± 0.01 at 100 kHz < ± 0.12 at 28.2 MHz[1] < -1.0 at 29.7 MHz[1]	< ± 0.01 at 100 kHz < ± 0.12 at 14.1 MHz < -1.0 at 14.9 MHz	< ± 0.01 at 100 kHz < ± 0.12 at 14.1 MHz[2] < -1.0 at 14.9 MHz[2]
Insertion delay at 200 kHz	50 ns ± 2 ns	50 ns ± 2 ns	90 ns ± 3 ns	90 ns ± 3 ns
Group delay ripple (ns) *(wrt 200 kHz)*	< ± 0.5 at 200 kHz < ± 2.0 at 27 MHz < ± 20 to 30 MHz	< ± 0.5 at 200 kHz < ± 2.0 at 27 MHz < ± 20 to 30 MHz	< ± 1.0 at 200 kHz < ± 4.0 to 13.5 MHz < ± 40 to 15 MHz	< ± 1.0 at 200 kHz < ± 4.0 at 13.5 MHz < ± 40 to 15 MHz
> 6 dB Frequency. *(wrt loss at 100 kHz)*	36 MHz	36 MHz [1]	18 MHz	18 MHz [2]
> 20 dB Frequency *(wrt loss at 100 kHz)*	43 MHz	43 MHz	21.5 MHz	21.5 MHz
Start of stopband	45 MHz	45 MHz	22.5 MHz	22.5 MHz
Stopband attenuation *(wrt loss at end of passband)*	> 40 dB	> 40 dB	> 40 dB	> 40 dB

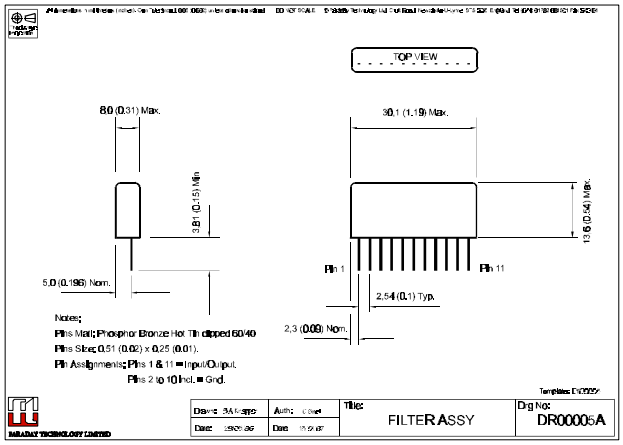


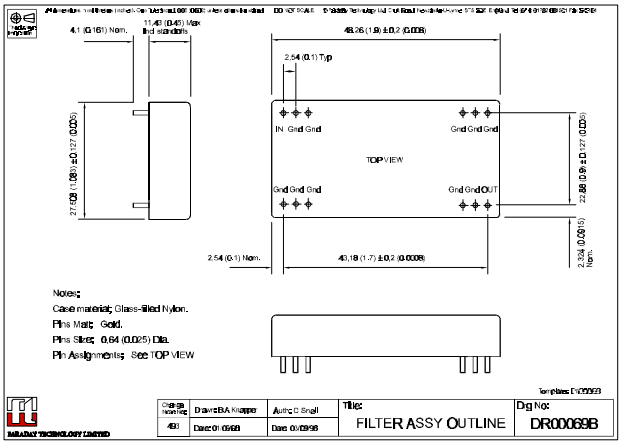
Example part number HD7425SPA is a passive, luminance sinx/x corrected for a s.f. of 74.25 MHz packaged in a 11 pin SIL package as DR00005A. Other sampling frequencies are available on request.

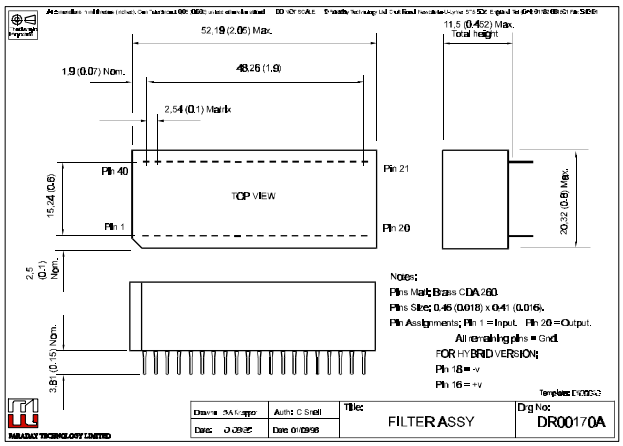
[1] Measured against sinx/x roll off for a sampling frequency of 74.25 MHz

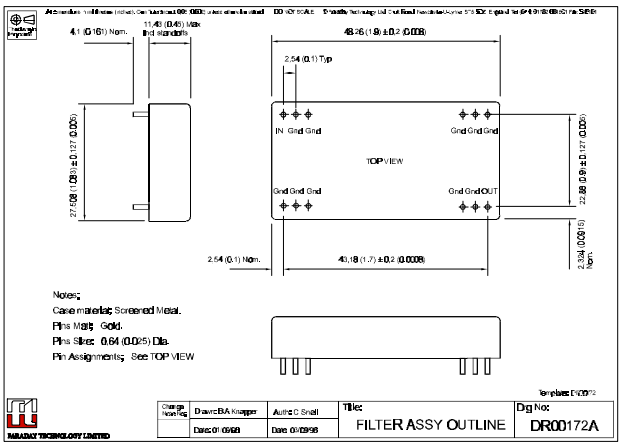
[2] Measured against sinx/x roll off for a sampling frequency of 37.125 MHz

PACKAGE DETAIL









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

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