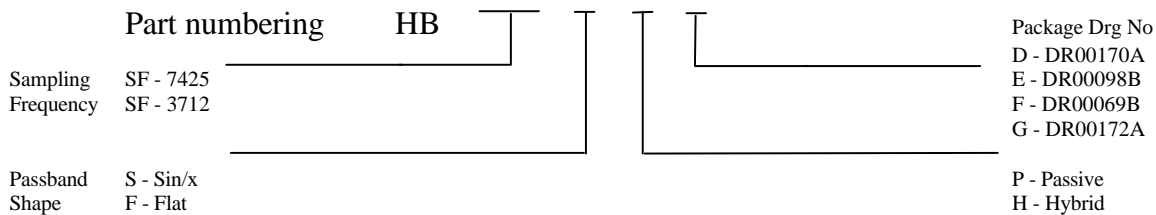


# HB SERIES HDTV FILTERS

## FULL SMPTE 260M, SMPTE 274M COMPLIANT

- Aqueously washable
- Compliant to SMPTE 260M, 274M, 296M, ITU-R BT709-2 (1125/60)
- Passive or zero loss hybrid versions
- Integer N<sup>o</sup> of clock delays between Luma and Chroma filters
- Plastic, Screened Metal or 40 pin DIP package
- Pre and Post Luminance and Chrominance filters

Type Number	HB7425F**	HB7425S**	HB3712F**	HB3712S**
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 <sup>1</sup>	< 1.3 dB	< 4.75 dB	< 1.0 dB	< 4.5 dB
End of Passband	30.0 MHz	30.0 MHz	15.0 MHz	15.0 MHz
Amplitude ripple (wrt 100 kHz)	< ± 0.05 dB	< ± 0.05 dB <sup>2</sup>	< ± 0.05 dB	< ± 0.05 dB <sup>3</sup>
Insertion delay at 200 kHz	112 ± 1 ns	112 ± 1 ns	220 ± 1 ns	215 ± 1 ns
Group delay ripple (wrt delay at 200 kHz)	< ± 1ns to 20.0 MHz	< ± 1ns to 20.0 MHz	< ± 2ns to 10.4 MHz	< ± 2ns to 10.4 MHz
Attenuation at 1/2 S.F. (wrt loss at 100 kHz)	> 12 dB	> 12 dB <sup>2</sup>	> 6 dB	> 6 dB <sup>3</sup>
> 40 dB Frequency (wrt loss at 100 kHz)	44.250 MHz	44.250 MHz	22.125 MHz	22.125 MHz
Start of stopband	54.2025 MHz	54.2025 MHz	27.1250 MHz	27.1250 MHz
Stopband attenuation (wrt loss at 100 kHz)	> 50 dB	> 50 dB	> 50 dB	> 50 dB
Power (hybrid versions)	± 5V 5mA per rail			



Example part number HB7425SPD is a passive, luminance sinx/x corrected for a s.f. of 74.25 MHz packaged in a 40 pin DIP package as DR00170A. Other sampling frequencies are available upon request.

<sup>1</sup> Hybrid versions have 0 dB insertion loss.  
<sup>2</sup> Measured against sinx/x roll off for a sampling frequency of 74.25 MHz  
<sup>3</sup> Measured against sinx/x roll off for a sampling frequency of 37.125 MHz

# PACKAGE DETAIL

