HB SERIES HDTV FILTERS

FULL SMPTE 260M, SMPTE 274M COMPLIANT

- Aqueously washable
- Passive or zero loss hybrid versions
- Plastic, Screened Metal or 40 pin DIP package
- Compliant to SMPTE 260M, 274M, 296M, ITU-R BT709-2 (1125/60)

• Integer N^o of clock delays between Luma and Chroma filters

Pre and Post Luminance and Chrominance filters

Type Number	HB7425F**	HB7425S**	HB3712F**	HB3712S**
Impedance (ohms) Filter Shape Passband Shape Sampling Frequency (S.F) Insertion loss at 100 kHz ¹ End of Passband	75 Lowpass Flat 74.25 MHz < 1.3 dB 30.0 MHz	75 Lowpass Sinx/x 74.25 MHz < 4.75 dB 30.0 MHz	75 Lowpass Flat 37.125 MHz < 1.0 dB 15.0 MHz	75 Lowpass Sinx/x 37.125 MHz < 4.5 dB 15.0 MHz
Amplitude ripple (wrt 100 kHz) Insertion delay at 200 kHz	$< \pm 0.05 \text{ dB}$ 112 ± 1 ns	$< \pm 0.05 \text{ dB}^2$ 112 ± 1 ns	$< \pm 0.05 \text{ dB}$ 220 ± 1 ns	$< \pm 0.05 \text{ dB}^3$ 215 ± 1 ns
Group delay ripple (wrt delay at 200 kHz)	$< \pm 1$ ns to 20.0 MHz $< \pm 1.5$ ns to 30 MHz	$< \pm 1$ ns to 20.0 MHz $< \pm 1.5$ ns to 30 MHz	$<\pm 2$ ns to 10.4 MHz $<\pm 3$ ns to 15 MHz	$< \pm 2$ ns to 10.4 MHz $< \pm 3$ ns to 15 MHz
Attenuation at $\frac{1}{2}$ S.F. (wrt loss at 100 kHz)	> 12 dB	$> 12 \text{ dB}^2$	> 6 dB	$> 6 \mathrm{dB}^3$
> 40 dB Frequency (wrt loss at 100 kHz)	44.250 MHz	44.250 MHz	22.125 MHz	22.125 MHz
Start of stopband Stopband attenuation (wrt loss at 100 kHz)	54.2025 MHz > 50 dB	54.2025 MHz > 50 dB	27.1250 MHz > 50 dB	27.1250 MHz > 50 dB
Power (hybrid versions	\pm 5V 5mA per rail			
Part numbering HB Sampling SF - 7425 Frequency SF - 3712			D E F	ackage Drg No - DR00170A - DR00098B - DR00069B - DR00172A
Passband S - Sin/x			Р	- Passive

Passband S - Sin/x Shape F - Flat

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.

¹ Hybrid versions have 0 dB insertion loss.

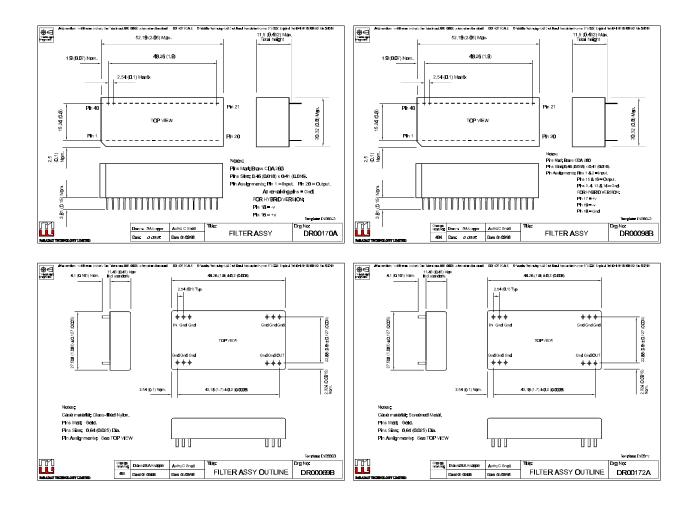
 $^2\,$ Measured against sinx/x roll off for a sampling frequency of 74.25 MHz

 3 Measured against sinx/x roll off for a sampling frequency of 37.125 MHz

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H - Hybrid

PACKAGE DETAIL



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