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° of clock delays between Luma and Chroma filters
- 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 [1]	< 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[2]	< ± 0.05 dB	< ± 0.05 dB[3]
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 < ± 1.5ns to 30 MHz	< ± 1ns to 20.0 MHz < ± 1.5ns to 30 MHz	< ± 2ns to 10.4 MHz < ± 3ns to 15 MHz	< ± 2ns to 10.4 MHz < ± 3ns to 15 MHz
Attenuation at $^1/_2$ S.F. *(wrt loss at 100 kHz)*	> 12 dB	> 12 dB[2]	> 6 dB	> 6 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	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			

Part numbering HB

Sampling Frequency	SF - 7425 SF - 3712	
Passband Shape	S - Sin/x F - Flat	
		Package Drg No D - DR00170A E - DR00098B F - DR00069B G - DR00172A
		P - Passive H - Hybrid

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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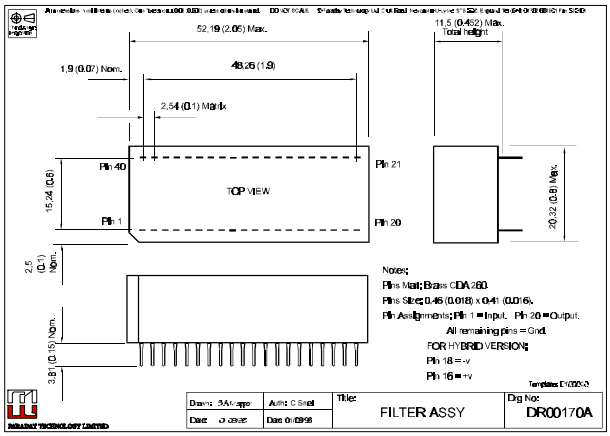
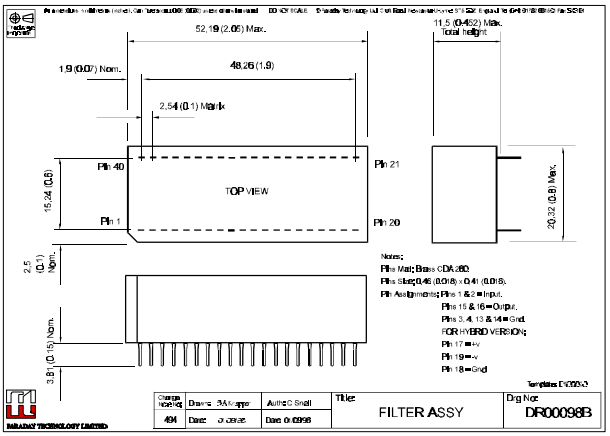
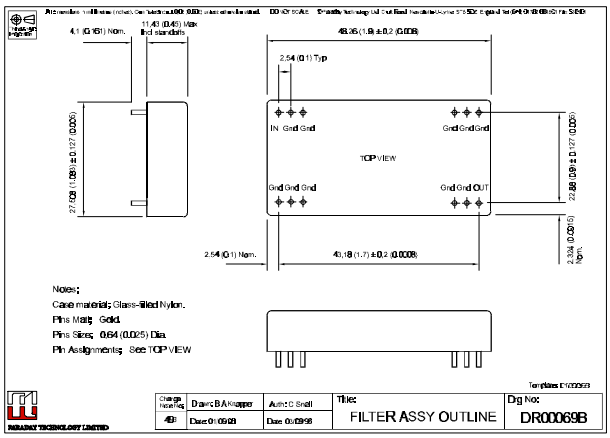
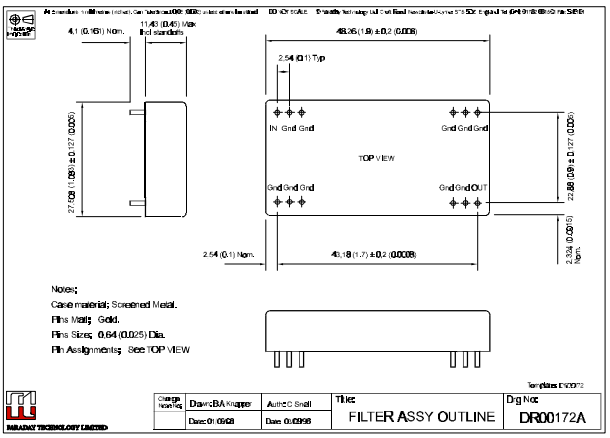
PACKAGE DETAIL









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