faraday LOW COST MONITOR FILTERS **TFV SERIES**

These low cost luma and chroma anti-aliasing and reconstruction filters, are designed for use in 4:2:2 a-d and d-a conversion i.e. sampling rates of 13.5 MHz (Y channel) and 6.75 MHz (U and V channels). Prefilters have a flat passband and the post-filters are shaped to provide sinx/x correction. These filters provide similar performance to the Faraday TFT range but at much reduced cost.

	LUMA		CHROMA	
Type Number	TFV1350F	TFV1350S	TFV0675F	TFV0675S
Filter Shape	Lowpass	Lowpass	Lowpass	Lowpass
Passband Shape	Flat	Sinx/x	Flat	Sinx/x
Sampling Frequency		13.5 MHz		6.75 MHz
Insertion Loss at 100 kHz	< 1.6 dB	< 5.1 dB	< 1.2 dB	< 5.1 dB
End Of Passband	5.5 MHz	5.5 MHz	2.3 MHz	2.3 MHz
Passband Amplitude Ripple	0.3 dB max	0.3 dB max^1	0.3 dB max	0.3 dB max ¹
Loss at half S.F.	$10 \text{ dB} \pm 2 \text{ dB}$	$10 \text{ dB} \pm 2 \text{ dB}^1$	> 12 dB	$> 12 \text{ dB}^1$
Start Of Stopband	8.2 MHz	8.2 MHz	4.1 MHz	4.1 MHz
Stopband Attenuation	39 dB min^2	39 dB min^3	39 dB min^2	39 dB min ³
Group Delay Ripple	< 21 ns	< 23 ns	40 ns max	40 ns max
Group Delay Bandwidth	5.0 MHz	5.0 MHz	2.2 MHz	2.2 MHz
Delay Time at 200 kHz	220 ns <u>+</u> 5 ns	217 ns <u>+</u> 5 ns	450 ns <u>+</u> 5 ns	450 ns <u>+</u> 5 ns
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
Aqueous Washable	Yes	Yes	Yes	Yes
Package Type	DR00008B	DR00008B	DR00005A	DR00008B

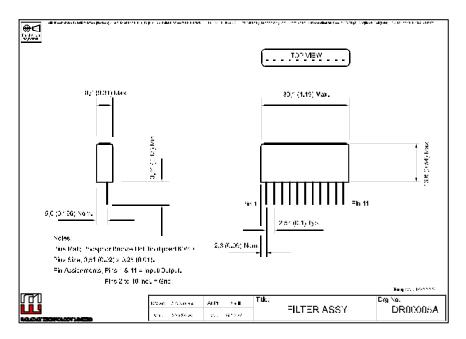
measured against sinx/x roll-off 1

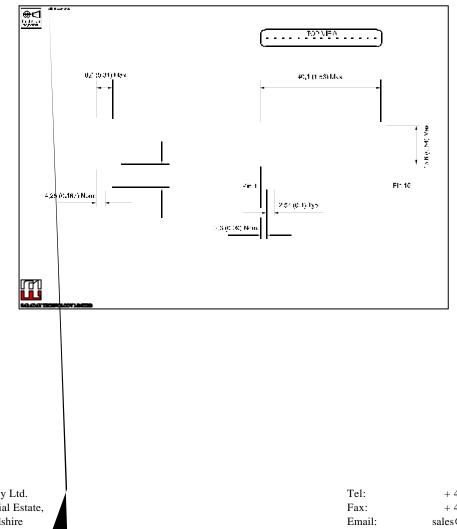
2 measured with respect to 100 kHz

3 measured with respect to end of passband

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PACKAGE DETAIL





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