

# 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). Pre-filters have a flat passband and the post-filters are shaped to provide  $\sin x/x$  correction. These filters provide similar performance to the Faraday TFT range but at much reduced cost.

<i>Type Number</i>	LUMA		CHROMA	
	<b>TFV1350F</b>	<b>TFV1350S</b>	<b>TFV0675F</b>	<b>TFV0675S</b>
<i>Filter Shape</i>	Lowpass	Lowpass	Lowpass	Lowpass
<i>Passband Shape</i>	Flat	$\sin x/x$	Flat	$\sin x/x$
<i>Sampling Frequency</i>	--	13.5 MHz	--	6.75 MHz
<i>Insertion Loss at 100 kHz</i>	< 1.6 dB	< 5.1 dB	< 1.2 dB	< 5.1 dB
<i>End Of Passband</i>	5.5 MHz	5.5 MHz	2.3 MHz	2.3 MHz
<i>Passband Amplitude Ripple</i>	0.3 dB max	0.3 dB max <sup>1</sup>	0.3 dB max	0.3 dB max <sup>1</sup>
<i>Loss at half S.F.</i>	10 dB $\pm$ 2 dB	10 dB $\pm$ 2 dB <sup>1</sup>	> 12 dB	> 12 dB <sup>1</sup>
<i>Start Of Stopband</i>	8.2 MHz	8.2 MHz	4.1 MHz	4.1 MHz
<i>Stopband Attenuation</i>	39 dB min <sup>2</sup>	39 dB min <sup>3</sup>	39 dB min <sup>2</sup>	39 dB min <sup>3</sup>
<i>Group Delay Ripple</i>	< 21 ns	< 23 ns	40 ns max	40 ns max
<i>Group Delay Bandwidth</i>	5.0 MHz	5.0 MHz	2.2 MHz	2.2 MHz
<i>Delay Time at 200 kHz</i>	220 ns $\pm$ 5 ns	217 ns $\pm$ 5 ns	450 ns $\pm$ 5 ns	450 ns $\pm$ 5 ns
<i>Impedance</i>	75 ohms	75 ohms	75 ohms	75 ohms
<i>Temperature Range</i>	0°C to 70°C	0°C to 70°C	0°C to 70°C	0°C to 70°C
<i>Aqueous Washable</i>	Yes	Yes	Yes	Yes
<i>Package Type</i>	DR00008B	DR00008B	DR00005A	DR00008B

<sup>1</sup> measured against  $\sin x/x$  roll-off

<sup>2</sup> measured with respect to 100 kHz

<sup>3</sup> measured with respect to end of passband

# PACKAGE DETAIL

