faraday
TECHNOLOGY

WIDESCREEN FILTERS

These filters are designed for use in Widescreen (16 x 9) television systems using 4:2:2 A-D and D-A conversion with sampling rates of 18 MHz for the luminance and 9 MHz for the colour difference channels. Two alternatives are offered as described below.

Full 601

- CCIR 601 compliant
- Industry standard footprint
- Pre and Post, Luma and Chroma filters
- Aqueously washable

Monitor Quality

- Small footprint SIL package
- Pre and Post, Luma and Chroma filters
- Aqueously washable

Specification CCIR 601 filters

Type Number	601F0767	601S0767	601F0367	601S0367
Impedance (ohms)	75	75	75	75
Filter Shape	Lowpass	Lowpass	Lowpass	Lowpass
Passband Shape	Flat	Sinx/x	Flat	Sinx/x
Sampling Frequency (S.F)	18 MHz	18 MHz	9 MHz	9 MHz
Insertion loss at 100 kHz	< 1.5 dB	< 4.5 dB	< 1.5 dB	< 4.5 dB
End of Passband	7.67 MHz	7.67 MHz	3.67 MHz	3.67 MHz
Amplitude ripple wrt 100 kHz	< 0.05 dB	< 0.05 dB[1]	< 0.10 dB	< 0.10 dB[2]
Insertion delay at 200 kHz	570 ns	569 ns	1116 ns	1115 ns
Group delay ripple wrt delay at 200 kHz	< ± 3 ns	< ± 3 ns	< ± 6 ns	< ± 6 ns
Attenuation at $^{1}/_{2}$ S.F. (wrt loss at 100 kHz)	> 12 dB	> 12 dB[1]	> 6 dB	> 6 dB[2]
Start of stopband	10.70 MHz	10.70 MHz	5.33 MHz	5.33 MHz
Stopband attenuation (wrt loss at end of passband)	> 40 dB	> 40 dB	> 40 dB	> 40 dB
Package	DR00003A	DR00003A	DR00003A	DR00003A

Specification Monitor Quality filters

Type Number	TFT1800F	TFT1800S	TFT0900F	TFT0900S
Impedance (ohms)	75	75	75	75
Filter Shape	Lowpass	Lowpass	Lowpass	Lowpass
Passband Shape	Flat	Sinx/x	Flat	Sinx/x
Sampling Frequency (S.F)	18 MHz	18 MHz	9 MHz	9 MHz
Insertion loss at 100 kHz	< 1.5 dB	< 4.5 dB	< 1.5 dB	< 4.5 dB
End of Passband	7.3 MHz	7.3 MHz	3.0 MHz	3.0 MHz
Amplitude ripple wrt 100 kHz	< 0.2 dB	< 0.3 dB[1]	< 0.2 dB	< 0.3 dB[2]
Insertion delay at 200 kHz	215 ns	230 ns	315 ns	300 ns
Group delay ripple wrt delay at 200 kHz	< ± 3 ns	< ± 3 ns	< 20 ns	< 22 ns
Attenuation at $^{1}/_{2}$ S.F. (wrt loss at 100 kHz)	12 dB ± 2 dB	12 dB ± 2 dB	12 dB ± 2 dB	12 dB ± 2 dB
Start of stopband	10.70 MHz	10.70 MHz	5.73 MHz	5.73 MHz
Stopband attenuation (wrt loss at end of passband)	> 40 dB	> 40 dB	> 40 dB	> 40 dB
Package	DR00008B	DR00008B	DR00005A	DR00008B

[1] Measured against sinx/x roll off for a sampling frequency of 18 MHz

[2] Measured against sinx/x roll off for a sampling frequency of 9 MHz

PACKAGE DETAIL

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