

ITU-R BT. 601 FILTERS

Appendix 2 – Part A

YUV ANTIALISING – STANDARD FOOTPRINT

Designed to meet the full requirements of Rec. ITU-R BT. 601-5 to suppress aliasing and to reconstruct signals in 4:2:2 YUV format A-D and D-A video interface applications operating at standard sampling rates of 13.5 MHz for the luminance (Y) channel and 6.75 MHz for the Colour Difference (U and V) channels.

- Fully compliant with ITU-R BT601
- Industry Standard Footprint
- Tighter delay time tolerances available
- Tight passband ripple specification

Type Number	601F0575	601S0575	601F0275	601S0275
Impedance (ohms)	75	75	75	75
Filter Shape	Lowpass	Lowpass	Lowpass	Lowpass
Passband Shape	Flat	Sinx/x	Flat	Sinx/x
Sampling Frequency	13.50 MHz	13.50 MHz	6.75 MHz	6.75 MHz
Insertion loss at 100 kHz	< 1.5 dB	< 4.5 dB	< 1.5 dB	< 4.5 dB
End of Passband	5.75 MHz	5.75 MHz	2.75 MHz	2.75 MHz
Amplitude ripple (dB) wrt 100 kHz	<± 0.025 to 5.50 MHz <± 0.050 to 5.75 MHz	<± 0.025 ¹ to 5.50 MHz <± 0.050 ¹ to 5.50 MHz	<± 0.050 to 2.75 MHz	<± 0.050 ² to 2.75 MHz
Delay time at 200 kHz	760 ± 7nS	758 ± 7nS	1488 ± 14 ns	1486 ± 14 ns
Group delay ripple wrt delay at 200 kHz	<±3nS to 5.75 MHz	<±3 nS to 5.75 MHz	<± 6 nS to 2.75 MHz <±12 nS to 3.0 MHz	<± 6 nS to 2.75 MHz <± 12 nS to 3.0 MHz
Attenuation at ¹ / ₂ S.F. wrt loss at 100 kHz	> 12 dB	> 12 dB ¹	> 6 dB	> 6 dB ²
Start of stopband	8.00 MHz	8.00 MHz	4.00 MHz	4.00 MHz
Stopband attenuation wrt loss at end of passband	> 40 dB	> 40 dB	> 40 dB	> 40 dB
Aqueous Washable ³	No	No	No	No
Package size	DR00003A	DR00003A	DR00003A	DR00003A

¹Measured against sinx/x roll-off for a sampling frequency of 13.5 MHz.

²Measured against sinx/x roll-off for a sampling frequency of 6.75 MHz.

³Contact Faraday for Washable options.

PACKAGE DETAIL

