Anti-Aliasing and Reconstruction TFT range

YUV COMPONENT SAMPLING

These very small, low cost filters are intended for use with A-D and D-A video converters where some deviation from full ITU-R BT601 standard can be tolerated, ie single pass applications. These filters are designed for use in 4:2:2 sampling systems, ie 13.5 MHz for the luminance (Y) channel and 6.75 MHz for the chrominance (U and V) channels.

- Ideal for single pass or monitor outputs
- Choice of package format to suit requirement
- Small size
- Excellent pulse characteristics

Type Number	**TFT1350F**	**TFT1350S**	**TFT0675F**	**TFT0675S**
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	< 3.0 dB
End of Passband	5.5 MHz	5.5 MHz	2.2 MHz	2.2 MHz
Amplitude ripple	< 0.2 dB	< 0.3 dB[1]	< 0.2 dB	< 0.3 dB[2]
Delay time at 200 kHz	287 ns	306 ns	430 ns	417 ns
Group delay ripple	< 15 ns	< 15 ns	< 30 ns	< 30 ns
Group delay equalised bandwidth	> 5.0 MHz	> 5.0 MHz	> 2.2 MHz	> 2.2 MHz
Attenuation at $^1/_2$ S.F. wrt loss at 100 kHz	12 ± 2 dB	12 ± 2 dB	12 ± 2 dB	12 ± 2 dB
Start of stopband	8.00 MHz	8.00 MHz	4.20 MHz	4.20 MHz
Stopband attenuation	> 40 dB	> 40 dB	40 dB nominal	40 dB nominal
Kp-rating - 2T sinesquared pulse T=100 ns	< 0.5%	< 0.5%	< 4%	< 4%
Aqueous Washable	Yes	Yes	Yes	Yes
Package size	DR00008B	DR00008B	DR00005A	DR00008B

[1]Measured against sinx/x roll-off for a sampling frequency of 13.5 MHz.
[2]Measured against sinx/x roll-off for a sampling frequency of 6.75 MHz.

PACKAGE DETAIL