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

- Aqueously washable
- Excellent pulse characteristics

- Small size
- Flat and Sinx/x versions

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 $\frac{1}{2}$ 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%
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

Drawn: B.A Knapper   Auth: C Grell   Title: **FILTER ASSY**   Drg No: **DR00005A**
Date: 29/05/96   Date: 16/01/97

TOP VIEW

8.0 (0.31) Max.
30.1 (1.19) Max.
3.81 (0.15) Min
13.6 (0.54) Max.
5.0 (0.196) Nom.
Pin 1   Pin 11
2.54 (0.1) Typ.
2.3 (0.09) Nom.

Notes;
Pins Matl; Phosphor Bronze Hot Tin dipped 60/40
Pins Size; 0.51 (0.02) x 0.25 (0.01).
Pin Assignments; Pins 1 & 11 = Input/Output.
Pins 2 to 10 incl. = Gnd.

Change Note No: 511   Drawn: B A Knapper   Auth: P Dutton   Title: **FILTER ASSY**   Drg No: **DR00008B**
Date: 09/10/98   Date: 09/10/98

TOP VIEW

8.0 (0.31) Max.
40.1 (1.58) Max.
3.81 (0.15) Min.
0.75 (0.03) Nom
13.6 (0.54) Max.
4.25 (0.167) Nom.
Pin 1   Pin 15
2.54 (0.1) Typ.
2.3 (0.09) Nom.

Notes;
Pins Matl; Phosphor Bronze Hot Tin dipped.
Pins Size; 0.51 (0.02) x 0.25 (0.01)
Pin Assignments; Pins 1 & 15 = Input/Output.
Pins 2 to 14 incl. = Gnd.

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