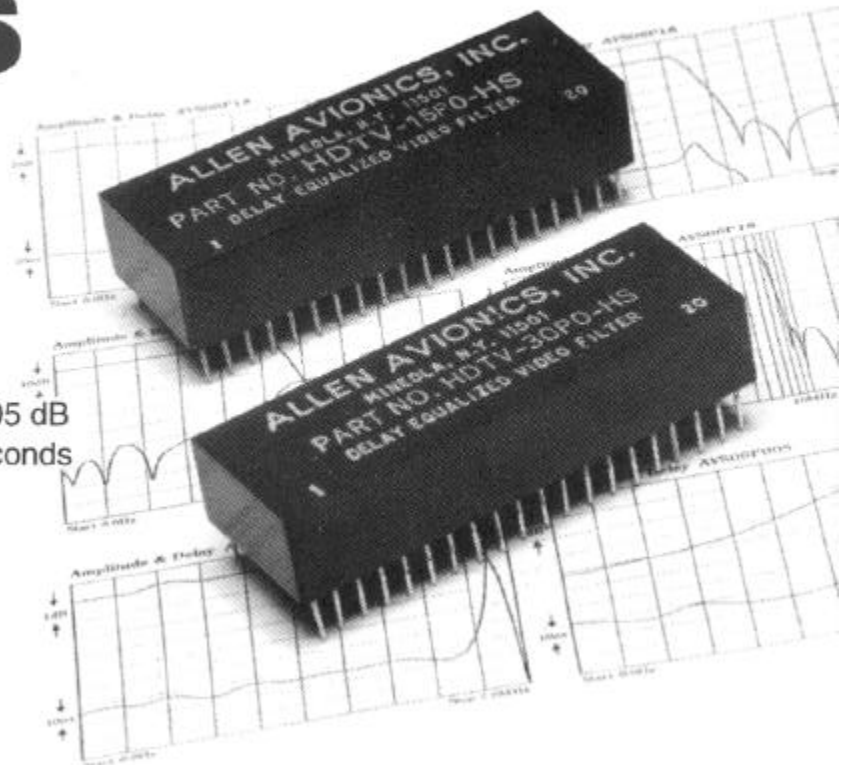


HDTV LOWPASS FILTERS

**Designed for use
in digitalization
of high definition
television signals.**

- Passband amplitude ripple less than $\pm .05$ dB
- Delay distortion less than ± 1.5 nanoseconds
- Group delay matching included
- Stopband ratio: 1.475 @ 40 dB
- Pre and Post filters available
- Sampling frequency
 - Y channel: 74.25 MHz
 - Cb & Cr channel: 37.125 MHz
- Several types of packages available
- 75 Ohm impedance
- Pre-Filter Insertion Loss: 1 dB maximum.
- Post-Filter Insertion Loss: 3.5 dB maximum.



These miniature lowpass filters are ideal for suppressing aliasing components in analog and digital HDTV systems. All new HDTV products that require control of delay and amplitude to SMPTE 260M and 274M specifications can be improved by using these filters. The HDTV Series filters are amplitude and group delay equalized to reduce ringing in high performance video applications.

TECHNICAL DATA

Part Number	Cutoff Frequency (MHz)	Stopband Ratio @ 40dB	-50dB @ (MHz)	Sample Rate (MHz)	-12 dB @ (MHz)	Amplitude Ripple (dB)	Delay Distortion to 20MHz to 30MHz	Typical Group Delay (nanoseconds)
HDTV-30P0-H	30.0	1.475	54.25	-	37.125	$\pm .05$	± 1 nsec ± 1.5 nsec	95
HDTV-30P0-HS	30.0	1.475	54.25	74.25	37.125	$\pm .05$	± 1 nsec ± 1.5 nsec	95

Part Number	Cutoff Frequency (MHz)	Stopband Ratio @ 40dB	-50dB @ (MHz)	Sample Rate (MHz)	-6dB @ (MHz)	Amplitude Ripple (dB)	Delay Distortion to 10MHz to 15MHz	Typical Group Delay (nanoseconds)
HDTV-15P0-H	15.0	1.475	27.125	-	18.56	$\pm .05$	± 1 nsec ± 1.5 nsec	180
HDTV-15P0-HS	15.0	1.475	27.125	37.125	18.56	$\pm .05$	± 1 nsec ± 1.5 nsec	180

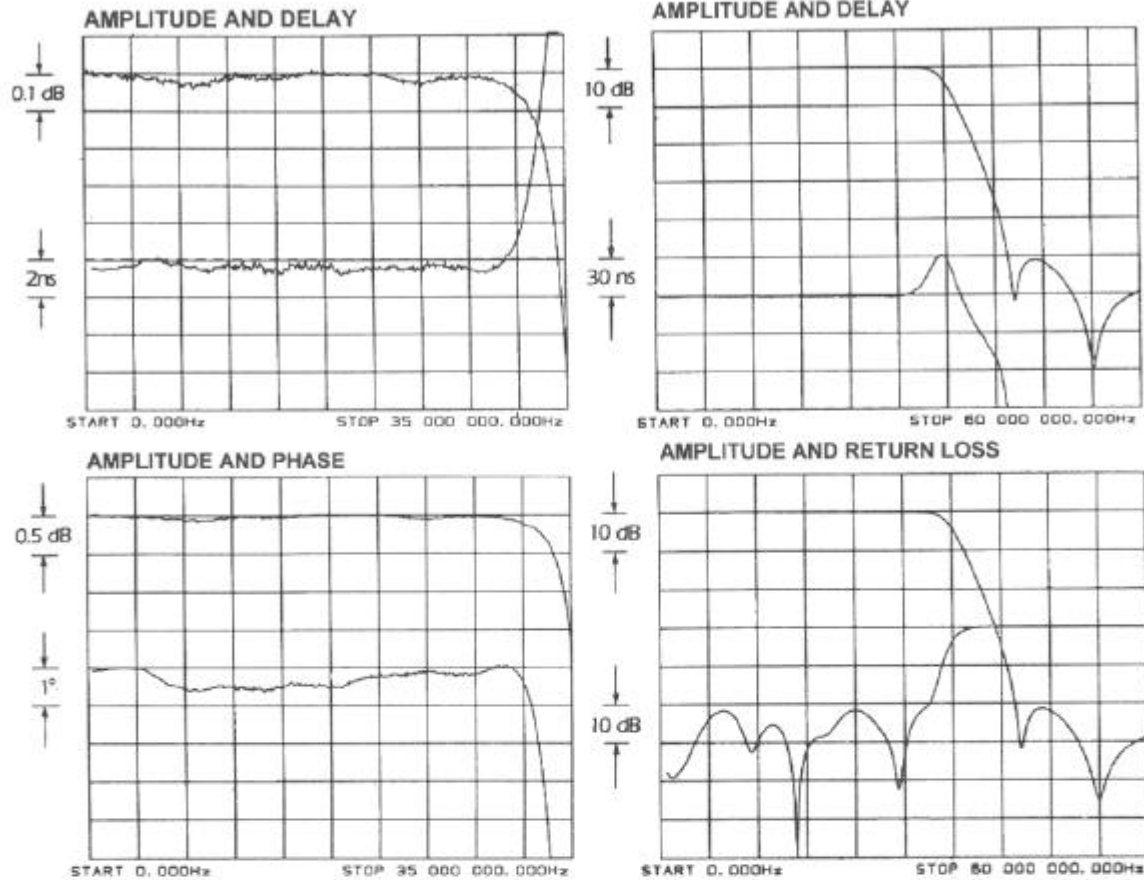
For post-filters add "S" to part number. Use V,H or M to designate the package style. See back page.

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TYPICAL RESPONSE CURVES

Part Number - **HDTV-30P0-H**



**Single-In-Line Package
"V" Package**

Dimensions: 0.4, 1.75, 0.67, 0.1, 0.25

Pin Functions:
 IN = 1 & 2
 OUT = 15 & 16
 GROUND = 3, 4, 13 & 14
 All others no connection.

Pin Specifications:
 Pin Width .020"
 Pin Thickness .010"
 Pin Length .250"
 Pin Spacing .100"

Ordering Examples:
 HDTV-30P0-V (pre-filter)
 HDTV-30P0-VS (post-filter)

**Dual-In-Line Package
"H" Package**

Dimensions: 0.7, 2.05, 0.4, 0.1, 0.167

Pin Functions:
 IN = 1 & 2
 OUT = 15 & 16
 GROUND = 3, 4, 13 & 14
 All others no connection.

Pin Specifications:
 Pin Width .020"
 Pin Thickness .010"
 Pin Length .187"
 Pin Spacing .100"

Ordering Examples:
 HDTV-30P0-H (pre-filter)
 HDTV-30P0-HS (post-filter)

**Metal Case Package
"M" Package**

Dimensions: 2.0, 1.7, 0.45, 0.75

Pin Functions:
 IN = 2
 OUT = 4
 GROUND = 1 & 3

Pin Specifications:
 Pin Diameter .020"
 Pin Length .250"

Ordering Examples:
 HDTV-30P0-M (pre-filter)
 HDTV-30P0-MS (post-filter)

Custom packaging available, please contact factory.

Note: Pin numbers for reference only.

For additional technical or ordering information, please call our Technical Sales Department.

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