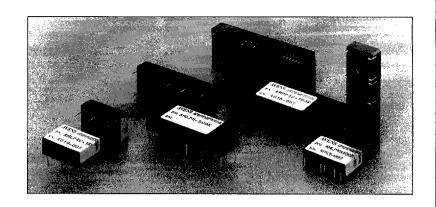
FIXED FILTER MODULES

High Order Frequency Filter

AM series offer a cost effective alternative in make or buy decision both in prototype and production. It is a low cost, semi-customized filter modules. It implements virtually any kind of filter applications. Standard features are stock and ready to deliver in 48 hours.



Features include:

□ CUSTOMER SPECIFIED FREQUENCY

Your choice of -3 dB Frequency. Customer modifications available. No additional charge.

□ COMPACT SIZES

1.25"L x 0.80"W x 0.40"H & 2.05"L x 0.80"W x 0.40"H 2.45"L x 0.77"W x 0.40"H.

□ RESPONSE CHOICES

Butterworth, Bessel, Chebyshev, Elliptic, & Linear Phase Elliptic.

☐ HIGH ORDER HIGH ATTENUATION

Implement filter orders from 4th up to 24th order filter. Attenuation greater than 80 dB @ 1.1 F_0 (-3 dB)

☐ SUPPORT ALL FILTER FUNCTIONS

Lowpass, Highpass, Bandpass, & Bandreject

☐ IDEAL FUNCTION BLOCK

Low output / High input impedance. Impedance matching available.

☐ STABLE OUTPUT

Unity gain output, Amplification available

□ COMPENSATED DC OFFSET

Internal DC offset < 2 mV. External adjustable to 0.0.

☐ BUILT-IN DECOUPLING

Internal power supply decoupling.

☐ SINGLE / DUAL POWER SUPPLY

Single Supply: 15.0 V & GND. Dual Supply: +/- 15.0 V & GND.

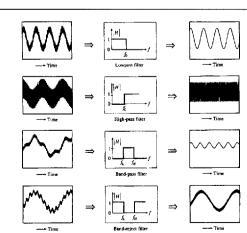
☐ LOW POWER CONSUMPTION

1 mA of supply current per 4th order.

Applications and Ratings

APPLICATIONS

- Anti-aliasing Filter
- Equalizers
- Differentiator
- Frequency Seperator
- Integrator
- D/A Post Filter
- Band-limit Amplifier
- Video processing
- Phase correction



ABSOLUTE MAXIMUM RATING

Supply Voltage \pm 15 V to \pm 5 V Input Voltage \pm 12 V Output Swing \pm 12 V (2k load) Dynamic Range > 90 dB Operating Temp.

 commercial industrial military
 0° C to 70° C

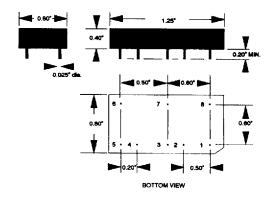
 55° C to 125° C
 55° C to 125° C

 55° C to 150° C
 65° C to 150° C

 Cut-Off Range
 0.01 Hz to 10 MHz

Case Style and Outline Dimensions

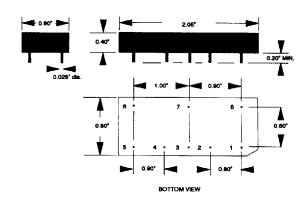
24 PIN DIP PACKAGE



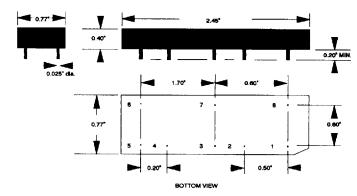
24, 40*, & 48 PIN DIP PACKAGE

PIN NO.	FUNCTION
1	Ground & Common of Supply
2	Filter Input
3	V+ Supply
4*	External DC Adjust
5*	Filter Output
6*	No Connection
7	V-Supply
8	No Connection

40 PIN DIP PACKAGE



48 PIN DIP PACKAGE



Specifications

ELECTRICAL CHARACTERISTICS

(Supply = ± 15 V., Load = $10 \text{ k}\Omega$, Temp. = 25° C)

Supply Current 10 mA/4th order Input Impedance > 500 kohm Output Impedance < 1 ohm (@ DC) Cut-off Variation ± 2% Frequency Stability 0.01 % /°C Unity Gain Output 0.0 dB

Max. Input Voltage ±12 V. Max. Output Voltage ±12 V. DC Offset $< \pm 2mV$

MECHANICAL CHARACTERISTICS

Dimension 1.25" x 0.77" x 0.40",

2.05" x 0.80" x 0.40", 2.45" x 0.77" x 0.40"

Case Materials Glass Filled

Thermoplastic Nylon

Pin Diameter 0.025"

OPTIONS

Description

Low power consumption (1mA)

Industrial temp. range (-25° C to 85° C) M - Military temp. range (-55° C to 125° C)

A1 - 10x amplification

A2 - 100x amplification

A3 - 1000x amplification

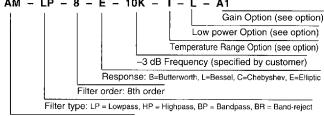
S - Single supply (+5 V to +18 V)

- Differential Input

Custom specification

TI - Low DC drift 25 ppm/°C

PART NUMBER SYSTEM (Typical part numbering example shown below)



Model Number (see selection)



Typical Frequency Response Curves Available (See Back of Catalog)

⁴⁰ Pin Dip Package: Pin 4 = Filter Output, Pin 5 no connection Pin 6 External DC adjustment