

# Small Signal Feed Through Filters AFPI 100, 160, 190 series

## Pi configuration, film dielectric

A family of feed through filters using film capacitor technology to achieve good temperature stability. This series are particularly used where high levels of attenuation up to 1GHz are required. The units are housed in robust, sealed metal containers of threaded construction, and offer a range of terminal finishes. Specifically designed for military, industrial, telecoms and medical applications, but especially suitable for use where fast rising transients are liable to be encountered.

- Very high attenuation level throughout frequency spectrum
- Self healing capacitors
- Wide choice of performance options
- Superior pulse current capability
- Excellent temperature stability
- Wire or tag termination options

## Mechanical Specifications

Manufacture: resin sealed metal containers

Connections: wire or tag terminations.



## Electrical Specifications (AFPI 100 only)

Rated voltage ( $V_R$ ): 200 Vdc

Category voltage ( $V_C$ ): 160 Vdc

Rated current ( $I_R$ ): referred to room temperature = 40°C

Voltage test (2s.): 300 V dc

Climatic category: HPF(55/125/56);

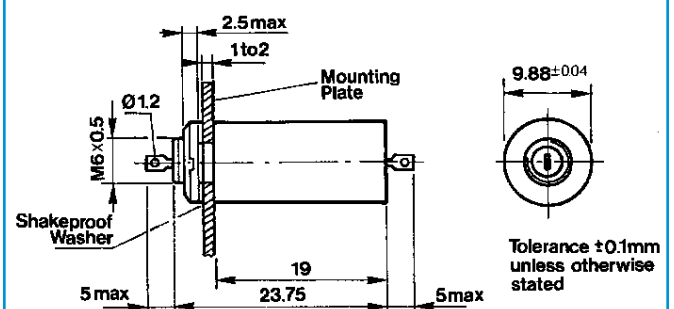
Temperature range: -25°C to +85°C

## Filter Range - AFPI 100 410

(example pt no. - AFPI100410 HPT1S)

Code	Max values		C (nF)	Typical Insertion loss (dB)					
	$I_R$ (A) dc	Rdc (mΩ)		50 kHz	100 kHz	300 kHz	1 MHz	10 MHz	100 MHz
HPT1S	0.5	<700	2x500	33	52	79	100	100	100
HFT1S	1	<200	2x500	8	35	66	95	100	100
HGT1S	3	<50	2x500	8	28	62	93	100	100
HHT1S	5	<10	2x500	-	16	44	74	100	100
HJT1S	10	<5	2x500	-	18	29	57	100	100

## Dimensions (mm) and connections



## Circuit diagram (Pi configuration)



# Small Signal Feed Through Filters AFPI 100,160,190 series

## Filter Range - AFPI 16 -\*

(example pt no. - AFPI161440DMW3N)

Code	Max values			C	Voltage Test (dc)	Climatic category	Dimensions (mm)				Dia (mm)	Typical Insertion loss (dB)					
	I <sub>r</sub>	V <sub>r</sub>	R <sub>dc</sub>				A	B	D	T		50	100	300	1	10	100
	dc	dc/ac	(mΩ)									(nF)	kHz	kHz	kHz	MHz	MHz
440DMW3N	16	100/-	<6	2x2000	250	40/085/21	16	34	16	M10x0.75	1.2	60	78	100	100	100	100
320WMW3N	16	440/-	<6	2x100	1400	40/085/21	12	34	16	M10x0.75	1.2	6	10	19	50	93	100
236TMW3N	16	600/250	<6	2x18nF	2700	40/085/21	16	34	16	M10x0.75	1.2			4	26	71	100
150TMW3N	16	600/250	<6	2x2.5	2700	40/085/21	12	34	16	M10x0.75	1.2				5	36	83

\* 0 - Wire terminations fitted at both ends

1 - 1 x 6.3x0.8mm Faston fitted at boss end & wire termination at other

2 - 2 x 6.3x0.8mm Faston fitted at both ends

## Filter Range - AFPI 190

(example pt no. - AFPI190410V6C3S)

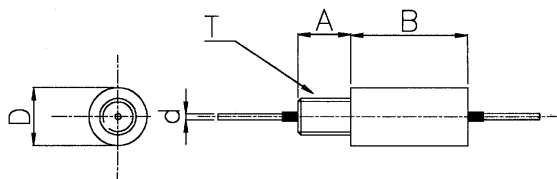
Code	Max values			C	Voltage Test (dc)	Climatic category	Dimensions (mm)				Dia (mm)	Termination options	Typical Insertion loss (dB)					
	I <sub>r</sub>	V <sub>r</sub>	R <sub>dc</sub>				A	B	D	T			50	100	300	1	10	100
	dc	dc/ac	(mΩ)										(nF)	kHz	kHz	MHz	MHz	MHz
<sup>s</sup> 410V6C3S	6	250/-	<15	2x500	2121	40/085/21	17	75	19	M12x0.75	1.2	c		23	53	78	100	100
440D3W4N	30	100/-	<2	2x2000	250	40/085/21	16	40	19	M12x0.75	1.8	a	60	78	100	100	100	100
320W3W4N	30	440/-	<2	2x100	1400	40/085/21	16	40	19	M12x0.75	2	a	6	10	19	50	93	100
236T3W4N	30	600/250	<2	2x18	2700	40/085/21	16	40	19	M12x0.75	2	a			4	26	71	100

<sup>s</sup> UL Approval




Case finish: N = Nickel plated

S = Silver plated

### Dimensions (mm) and connections



### Termination Options

- a  - typically 40mm long, fitted as standard
- b  - 6.3x0.8mm Faston
- c  - Length 6mm Max, eye Ø to accept 1.2mmØ wire

### Circuit diagram (Pi configuration)

