# Small Signal Feed Through Filters **AFCC** 100, 160, 190 series

Small signal feed through capacitor filters enable a consistently high frequency performance to be combined with compact mechanical enclosures, significant current capability and terminations which suit use in many industrial applications such as Telecommunications, Medical equipment and DC power systems. Under AC use consideration must be given to the leakage current caused by the capacitance value in order to ensure compliance with equipment safety specifications.

The construction is designed so that multiple high frequency resonances are minimised and hence the performance is maintained over the operating frequency range. These products avoid this weakness so often demonstrated in many commercially available products. A wide range of performance is available in various voltage ratings while limiting the case sizes so that these components can be more easily integrated within customers' applications.

The dielectric construction of the capacitor elements means that they have high level voltage withstand capability and can cope with rapid transients.

These products are fully encapsulated in a flame retardant V0 to UL 94 polyurethane resin system.


### Mechanical Specifications

Manufacture: resin sealed metal containers.

Connections: wire or tag terminations.

### Electrical Specifications (AFPI 100 only)

Rated voltage ($V_R$): see relevant product table

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

Voltage test ($2_S$.): see relevant product table

Climatic category: see relevant product table

### Filter Range - AFCC100

*(Example pt no. AFCC100215LKW2S)*

| Code | Max values | | C | Voltage test | | Dimensions (mm) | | | | | Dia | Insertion loss |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | $I_R$ | $V_R$ | | | | | | | | | | |
| | dc | dc/ac | (nF) | | | A | B | C | D | T | d | graph |
| 215LKW2S | 15 | 350/- | 15 | 25/085/21 | 1500Vdc | 4.75 | 15 | 100 | 10 | M6x0.5 | 1.2 | Plot 2 |
| 220UKT8T | 15 | 630/- | 20 | 55/125/56 | 1000Vdc | 4.75 | 12 | 30 | 10 | M6x0.75 | 1.2 | Plot 3 |
| 250UHW4T | 5 | 630/- | 50 | 55/125/56 | 1000Vac | 4.75 | 14 | 30 | 10 | M6x0.75 | 1.6 | Plot 5 |
| 250UKT8T | 15 | 630/- | 50 | 55/125/56 | 1000Vac | 4.75 | 12 | 27 | 10 | M6x0.75 | 1.6 | Plot 5 |
| 322JKW3S | 15 | 250/- | 220 | 55/125/56 | 400Vdc | 4.75 | 14 | 30 | 10 | M6x1 | 0.8 | Plot 7 |
| 390SKW8T | 15 | 150/- | 900 | 25/085/56 | 300Vdc | 7.95 | 10 | 26 | 10 | M6x0.75 | 1.2 | Plot 8 |
| 390SKW9T | 15 | 150/- | 900 | 25/085/56 | 300Vdc | 4.75 | 10 | 26 | 10 | M6x0.75 | 1.2 | Plot 8 |
| 414SRW9S | 20 | 150/- | 1400 | 25/085/21 | 250Vdc | 7.95 | 19 | 37 | 10 | M6x0.5 | 1.2 | Plot 9 |

### Filter Range - AFCC160

*(Example pt no. AFCC100215LKW2S)*

| Code | Max values | | C | Voltage test | | Dimensions (mm) | | | | | Dia | Insertion loss |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | $I_R$ | $V_R$ | | | | | | | | | | |
| | dc | dc/ac | (nF) | | | A | B | C | D | T | d | graph |
| 125VMW2N | 16 | 250/- | 2.5 | 25/085/21 | 3950Vdc | 16 | 24 | 120 | 16 | M10x0.75 | 1 | Plot 1 |
| 218VMW6N | 16 | 250/- | 18 | 25/085/21 | 2700Vdc | 6 | 14 | 50 | 16 | M10x0.75 | 1.2 | Plot 2 |
| 222VMW1N | 16 | 250/- | 22 | 25/085/21 | 3750Vdc | 16 | 38 | 135 | 16 | M10x0.75 | 1 | Plot 3 |
| 235VLW3N | 25 | 250/- | 35 | 25/085/21 | 3750Vdc | 16 | 34 | 135 | 16 | M10x0.75 | 1.6 | Plot 4 |
| 250MMW1N | 16 | 250/- | 50 | 25/085/21 | 3750Vdc | 16 | 25 | 121 | 16 | M10x0.75 | 1.2 | Plot 5 |
| 510DMW1N | 16 | 100/- | 10000 | 25/085/21 | 250Vdc | 16 | 25 | 121 | 16 | M10x0.75 | 1.2 | Plot 10 |

**Approvals** ▲ Where indicated

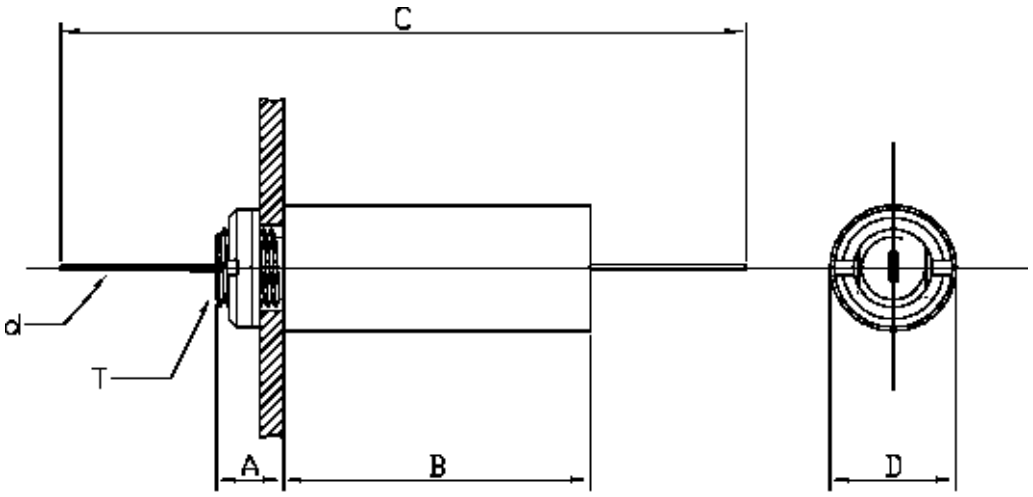
# Small Signal Feed Through Filters **AFCC** 100,160,190 series

### Filter Range - AFCC190

*(Example pt no. AFCC190218W6W9N)*

| Code | Max values | | C | Voltage test | | Dimensions (mm) | | | | | Dia | Insertion loss |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | $I_R$ dc | $V_R$ dc/ac | (nF) | | | A | B | C | D | T | d | graph |
| ▲ 218W6W9N | 63 | -/130 | 18 | 25/085/21 | 1420Vdc | 12 | 16 | 70 | 19 | M12x0.75 | M6 | Plot 2 |
| 233VJW4S | 10 | -/250 | 33 | 25/085/21 | 2700Vdc | 17 | 38 | 96 | 19 | M12x0.75 | 1.2 | Plot 4 |
| 310PKW4N | 15 | 1000/- | 100 | 25/085/21 | 2250Vdc | 17 | 40 | 97 | 19 | M12x0.75 | 1.2 | Plot 6 |
| 322T3W9N | 30 | 400/- | 220 | 25/085/21 | 800Vdc | 14 | 18 | 65 | 19 | M16x1 | M6 | Plot 7 |

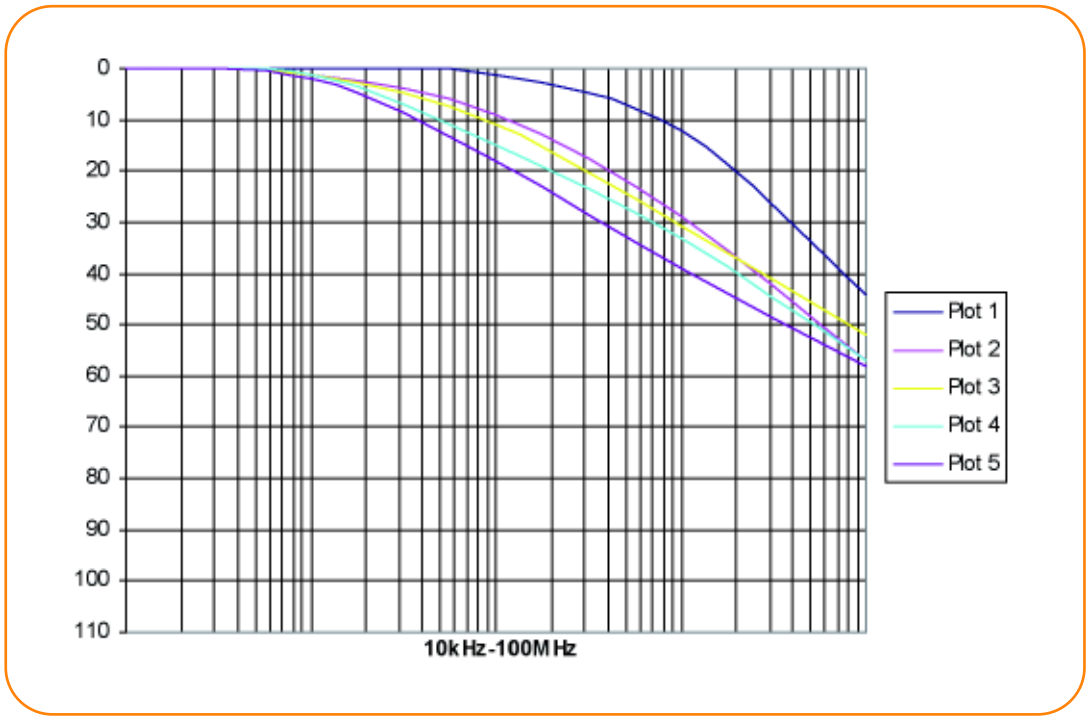
### Dimensions (mm) and connections

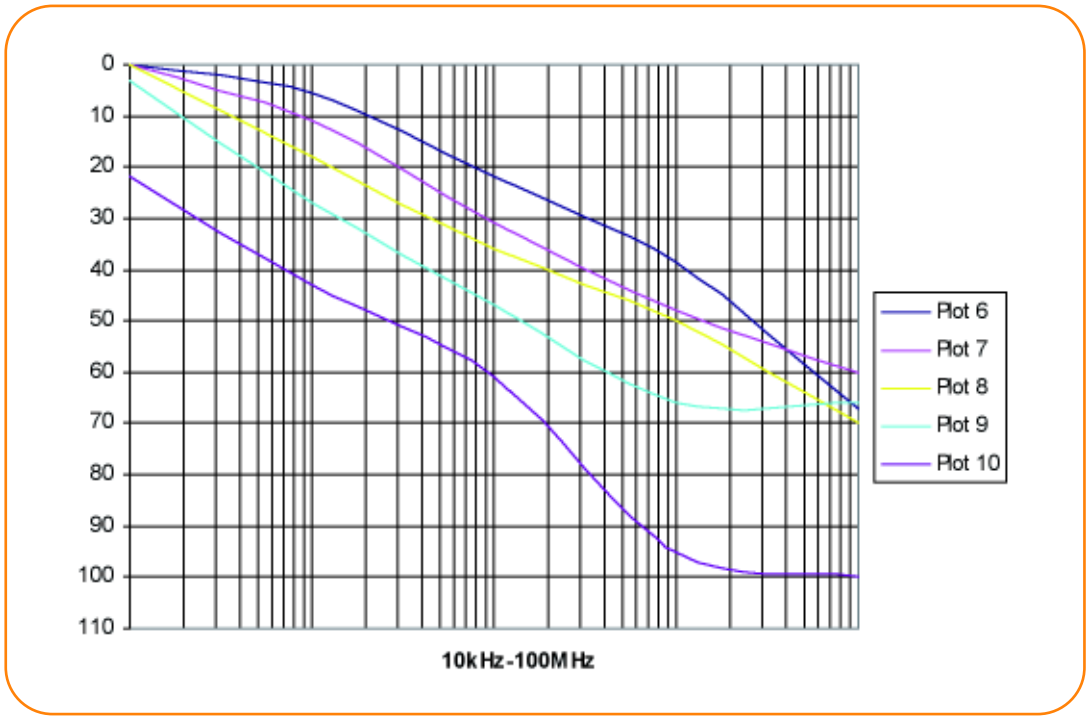



### Circuit diagram

**Approvals** Where indicated

## Typical Insertion Loss Characteristics




**Approvals** Where indicated