

## 6-Cavity base station duplexers for the 450 MHz band

### DESCRIPTION

- > 150 W base station duplexers.
- > Both the  $\frac{1}{4} \lambda$  models and the  $\frac{3}{4} \lambda$  models are continuously tunable from 406 MHz to 470 MHz.
- > Low insertion loss due to silver-plated, temperature compensated resonator elements in high-Q 40 x 40 mm cavities.
- > Single channel tuned as standard.
- > Multi-channel tuning possible with slightly reduced data (factory tuning recommended).
- > Fully environmentally tested.

DPF 70/6-150 cavity type  $\frac{1}{4} \lambda$



DPF 70/6-150 cavity type  $\frac{3}{4} \lambda$



### SPECIFICATIONS

| Electrical                           |  |   |   |   |
|--------------------------------------|--|---|---|---|
| Model                                | DPF 70/6-150-... $\frac{3}{4} \lambda$                 |   | DPF 70/6-150-... $\frac{1}{4} \lambda$                |   |
| Cavity Type                          | $\frac{3}{4} \lambda$                                  |   | $\frac{1}{4} \lambda$                                 |   |
| Frequency                            | 406 - 470 MHz  |   | 406 - 470 MHz   |   |
| Max. Input Power                     | 150 W  |   | 150 W   |   |
| Special spec. info                   | Single-channel tuned.<br>Spacing = 2 MHz, P ≤ 100 W    | Single-channel tuned.<br>Spacing = 3.5 MHz, P ≤ 100 W | Single-channel tuned.<br>Spacing = 5 MHz, P ≤ 150 W   | Multi-channel tuned.<br>Spacing = 5 MHz,<br>BW Tx and Rx = 2 MHz, P ≤ 100 W |
| Insertion Loss Tx-Ant and Ant-Rx     | ≤ 1.4 dB   | ≤ 1.3 dB  | ≤ 1.2 dB  | ≤ 1.4 dB  |
| Tx-Noise Suppression on Rx-Frequency | > 70 dB  | > 80 dB   | > 80 dB   | > 60 dB   |
| Rx-Isolation on Tx-Frequency         | > 70 dB  | > 80 dB   | > 80 dB   | > 60 dB   |
| Impedance                            | 50 Ω   |   | 50 Ω  |   |
| Duplex Spacing                       | 2 - 3 MHz  |   | 3 - 5 MHz   |   |
| VSWR                                 | < 1.5:1  |   | < 1.5:1   |   |
| Mechanical                           |  |   |   |   |
| Connection(s)                        | N(f)   |   | N(f)  |   |
| Colour                               | Black  |   | Black   |   |
| Dimensions                           | Approx. 557 x 250 x 50 mm /<br>21.93 x 9.84 x 1.97 in. |   | Approx. 238 x 250 x 50 mm /<br>9.37 x 9.84 x 1.97 in. |   |
| Weight                               | Approx. 4.6 kg / 10.14 lb.                             |   | Approx. 2.5 kg / 5.51 lb.                             |   |
| Environmental                        |  |   |   |   |
| Operating Temperature Range          | -30°C to +60°C   |   | -30°C to +60°C  |   |
| Frequency Stability                  | 4.5 ppm/° C (approx.)                                  |   | 4.5 ppm/° C (approx.)                                 |   |

ORDERING

| Model                          | Product No. | Description                | Frequency   |
|--------------------------------|-------------|----------------------------|-------------|
| DPF 70/6-150-2/3               | 200000369   | CAVITY TYPE: 1/4 $\lambda$ | 2 - 3 MHz   |
| DPF 70/6-150-3/5               | 200001617   | CAVITY TYPE: 1/4 $\lambda$ | 3 - 5 MHz   |
| DPF 70/6-150-5/7               | 200001610   | CAVITY TYPE: 1/4 $\lambda$ | 5 - 7 MHz   |
| DPF 70/6-150-7/9               | 200001615   | CAVITY TYPE: 1/4 $\lambda$ | 7 - 9 MHz   |
| DPF 70/6-150-9/11              | 200001612   | CAVITY TYPE: 1/4 $\lambda$ | 9 - 11 MHz  |
| DPF 70/6-150-11/13             | 200001872   | CAVITY TYPE: 1/4 $\lambda$ | 11 - 13 MHz |
| DPF 70/6-150-13/15             | 200001873   | CAVITY TYPE: 1/4 $\lambda$ | 13 - 15 MHz |
| DPF 70/6-150-2/3-3/4 $\lambda$ | 200001689   | CAVITY TYPE: 3/4 $\lambda$ | 2 - 3 MHz   |
| DPF 70/6-150-3/5-3/4 $\lambda$ | 200002062   | CAVITY TYPE: 3/4 $\lambda$ | 3 - 5 MHz   |

Typical VSWR curve

