

6-Cavity base station duplexers for the 450 MHz band

DESCRIPTION

- 150 W base station duplexers.
- Both the ¼ λ models and the ¾ λ 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.
- Multi-channel tuning possible with slightly reduced data (factory tuning recommended).
- Fully environmentally tested.

SPECIFICATIONS

Electrical		
Model	DPF 70/6-150-2/3-¾	DPF 70/6-150-3/5
Frequency	406 - 470 MHz	
Insertion Loss Tx-Ant and Ant-Rx	Single-channel tuned. Spacing = 2 MHz, 100 W: < 1.4 dB Single-channel tuned. Spacing = 3.5 MHz, 100 W: < 1.3 dB	Single-channel tuned. Spacing = 5 MHz, 100 W: < 1.2 dB Multi-channel tuned. Spacing = 5 MHz, Port Width = 2MHz, 100 W: < 1.4 dB
Cavity Type	¾λ	¼λ
Tx-Noise Suppression on Rx-Frequency	Single-channel tuned. Spacing = 2 MHz, 100 W: > 70 dB Single-channel tuned. Spacing = 3.5 MHz, 100 W: > 80 dB	Single-channel tuned. Spacing = 5 MHz, 100 W: > 80 dB Multi-channel tuned. Spacing = 5 MHz, Port Width = 2MHz, 100 W: > 60 dB
Impedance	50 Ω	
Duplex Spacing	2 - 3 MHz	3 - 5 MHz
VSWR	< 1.5:1	
Maximum Input Power	150 W	
Rx-Isolation on Tx-Frequency	Single-channel tuned. Spacing = 2 MHz, 100 W: > 70 dB Single-channel tuned. Spacing = 3.5 MHz, 100 W: > 80 dB	Single-channel tuned. Spacing = 5 MHz, 100 W: > 80 dB Multi-channel tuned. Spacing = 5 MHz, Port Width = 2MHz, 100 W: > 60 dB
Frequency Stability	4.5 ppm/° C (approx.)	

Mechanical		
Connection(s)	N(f)	
Colour	Black	
Dimensions	557 x 250 x 50 mm	238 x 250 x 50 mm
Weight	4.6 kg / 10.14 lb	2.5 kg / 5.51 lb

Environmental		
Operating Temperature Range	-30 °C to +60 °C	

ORDERING

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

DPF 70/6-150 cavity type ¼ λ



DPF 70/6-150 cavity type ¾ λ



DIAGRAM

TYPICAL RESPONSE CURVES

