DPF 70/6-150...

6-Cavity base station duplexers for the 450 MHz band

DESCRIPTION

- 150 W base station duplexers.
- = Both the 1/4 λ models and the 3/4 λ models are continuously tunable from 406 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.

DPF 70/6-150 cavity type 1/4 λ



DPF 70/6-150 cavity type 3/4 λ



ORDERING DESIGNATIONS

ТҮРЕ	PRODUCT NO.	CAVITY TYPE	DUPLEX SPACING (MHZ)
DPF 70/6-150-2/3	200000369	1⁄4 λ	2 - 3
DPF 70/6-150-3/5	200001617	1⁄4 λ	3 - 5
DPF 70/6-150-5/7	200001610	1⁄4 λ	5 - 7
DPF 70/6-150-7/9	200001615	1⁄4 λ	7 - 9
DPF 70/6-150-9/11	200001612	1⁄4 λ	9 - 11
DPF 70/6-150-11/13	200001872	1⁄4 λ	11 - 13
DPF 70/6-150-13/15	200001873	1⁄4 λ	13 - 15
DPF 70/6-150-2/3-3/4	200001689	3⁄4 λ	2 - 3
DPF 70/6-150-3/5-3/4	200002062	3⁄4 λ	3 - 5

SPECIFICATIONS

ELECTRICAL							
MODEL	DPF 70/6-1	150-2/3-34	DPF 70/6-150-3/5				
CAVITY TYPE	3⁄4 λ		1⁄4 λ				
TX/RX FREQUENCY	406 - 470	MHz					
MAX. INPUT POWER	150 W						
TUNING	Single- channel tuned. Spacing = 2 MHz 100 W	Single- channel tuned. Spacing = 3.5 MHz 100 W	Single- channel tuned. Spacing = 5 MHz 150 W	tuned. Spacing			
INSERTION LOSS TX - ANT. AND ANT RX	≤ 1.4 dB	≤ 1.3 dB	≤ 1.2 dB	≤ 1.4 dB			
TX NOISE SUPPRESSION ON RX-FREQ.	> 70 dB	> 80 dB	> 80 dB	> 60 dB			
RX ISOLATION ON TX-FREQUENCY	> 70 dB > 80 dB		> 80 dB	> 60 dB			
DUPLEX SPACING	2 - 3 MHz		3 - 5 MHz				
IMPEDANCE	Nom. 50 Ω						
SWR	≤ 1.5	≤ 1.5	≤ 1.5	≤ 1.5			
MECHANICAL							
TEMP. RANGE	-30° C → +	-60° C					
FREQ. STABILITY	Approx. 4.	5 ppm/° C					
CONNECTOR TYPE	N-female						
COLOUR	Black						
DIMENSIONS (L x W x H)	585 x 250	x 50 mm	260 x 250 x 50 mm				
WEIGHT	Approx. 4.	6 kg	Approx. 2.5 kg				

TYPICAL RESPONSE CURVES

INSERTION LOSS DUPLEXER TYPE: DPF 70/6-150-2/3-34 LOW PORT [db] PORT ATTENUATION [db]								IN	INSERTION LOSS							
LC	W POR	T [dl	3]		PC	RT AT	TENU/	AUITA	I [dB]		HI	HIGH PORT [dB]				
0	LC	w		0		LOW			HIGH			0		HIGH		
0.5				10			\supset	\triangleleft			0.5					
1.0	-			20	_		/				1.0				_	
1.5				30							1.5		1	1		
2.0	_			40							2.0					
2.5	_		$\backslash \mid$	50		\setminus				$(\perp$	2.5		1			
3.0	_			60		ΛI		_	1/		3.0	1				
3.5	_		\downarrow	70		11			\mathbb{H}		3.5			_		
4.0				80		\mathbb{N}			W		4.0					
4.5				90		V			V		4.5					
-2.	0 -1	.0	0		-2.0	-1.0	f[M	Hz]	+1.0	+2.0) (D	+1.	0 +	-2	

TYPICAL RESPONSE CURVES

	SERTION DW POR			DUPLEXER TYPE: DPF 70/6-150-3/5 PORT ATTENUATION [dB]						INSERTION LOSS HIGH PORT [dB]			
0	LOW			0	LOW		HIGH				HIGH		
0.5				10			\checkmark			0.5			1
1.0	1			20	1			1		1.0			1
1.5		7		30				1		1.5		Δ	
2.0	1	1		40					/	2.0			1
2.5				50	\mathbf{X}			λ		2.5			1
3.0	1		1	60					\square	3.0	1		
3.5	1		1	70	$-\lambda$	\vdash			/	3.5	\perp		1
4.0	1			80				_\!/		4.0			
4.5				90				V		4.5			
-4	-3 -3	2 -1	1 ()	-4 -3 -	2 -1 f[/	AHz] +1	+2 +	3 +4	() +	1 +2	+3 +



PROCOM A/S reserve the right to amend specifications without prior notice. 18/12/14

