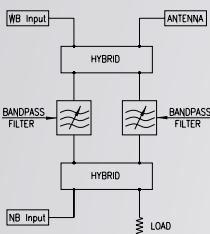


UC/FM/LB4-20

FM DIRECTIONAL FILTER TYPE COMBINER

FEATURES

- FM double bridge channel combiner
- 4 pole / 500 mm (19.7 in)
- adjustable selectivity
- temperature compensated



ELECTRICAL AND MECHANICAL DATA

COMBINER TYPE	UC/FM/LB4-20/A	UC/FM/LB4-20/B	UC/FM/LB4-20/C						
FREQUENCY RANGE									
- wideband input	87.5 ÷ 108 MHz	87.5 ÷ 108 MHz	87.5 ÷ 108 MHz						
- narrowband input	Tunable over entire FM range	Tunable over entire FM range	Tunable over entire FM range						
INPUTS AND OUTPUT IMPEDANCE									
	50 ohm	50 ohm	50 ohm						
RETURN LOSS									
- wideband input	≥ 26 dB	≥ 26 dB	≥ 26 dB						
- narrowband input (at carrier f_0)	≥ 32 dB	≥ 32 dB	≥ 32 dB						
INSERTION LOSS (at carrier f_0)									
NB input with freq. spacing ±1.0 MHz	≤ 0.32 dB	≤ 0.32 dB	≤ 0.32 dB						
NB input with freq. spacing ±0.8 MHz	≤ 0.38 dB	≤ 0.38 dB	≤ 0.38 dB						
NB input with freq. spacing ±0.6 MHz	≤ 0.46 dB	≤ 0.46 dB	≤ 0.46 dB						
WB input	≤ 0.10 dB	≤ 0.10 dB	≤ 0.10 dB						
WB input (0.6MHz freq. spacing)	≤ 0.20 dB	≤ 0.20 dB	≤ 0.20 dB						
ISOLATION (at carrier f_0)									
- Narrowband input to wideband input	≥ 35 dB (typical)	≥ 35 dB (typical)	≥ 35 dB (typical)						
- Wideband input to narrowband input	≥ 50 dB	≥ 50 dB	≥ 50 dB						
GROUP DELAY									
(With 0.6 MHz frequency spacing)	≤ 50 ns at f_0 ±100 kHz ≤ 100 ns at f_0 ±150 kHz	≤ 50 ns at f_0 ±100 kHz ≤ 100 ns at f_0 ±150 kHz	≤ 50 ns at f_0 ±100 kHz ≤ 100 ns at f_0 ±150 kHz						
MAX POWER RATINGS / freq. spacing (MHz)	±1.0 - Narrowband input ** - Wideband input - Total output	±0.8 25 kW 45 kW 45 kW	±0.6 20 kW 45 kW 45 kW	±1.0 25 kW 70 kW 70 kW	±0.8 24 kW 70 kW 70 kW	±0.6 20 kW 70 kW 70 kW	±1.0 25 kW 120 kW 120 kW	±0.8 24 kW 120 kW 120 kW	±0.6 20 kW 120 kW 120 kW
OPERATING TEMPERATURE RANGE	-10 to + 45°C (+14 to +113°F)			-10 to + 45°C (+14 to +113°F)			-10 to + 45°C (+14 to +113°F)		
OVER TEMPERATURE*	typical 30 K at max NB input power			typical 30 K at max NB input power			typical 30 K at max NB input power		
INPUT PORTS									
- Narrowband input	3-1/8" Unfl.			3-1/8" Unfl.			3-1/8" Unfl.		
- Wideband input	3-1/8" Unfl.			4-1/2" Unfl.			6-1/8" Unfl.		
OUTPUT PORT	3-1/8" Unfl.			4-1/2" Unfl.			6-1/8" Unfl.		
WEIGHT (approx)	360 kg (794 lb)			375 kg (827 lb)			395 kg (871 lb)		

* referred to ambient temperature. Recommended: [AmbientTemp. + OverTemp.] ≤ 70°C (158°F)

** increased power on request

UC/FM/LB4-20

FM DIRECTIONAL FILTER TYPE COMBINER

MECHANICAL LAYOUT

UC/FM/LB4-20/A

UC/FM/LB4-20/B

UC/FM/LB4-20/C

