

FM 4-Pole 280 mm Balanced Combiner

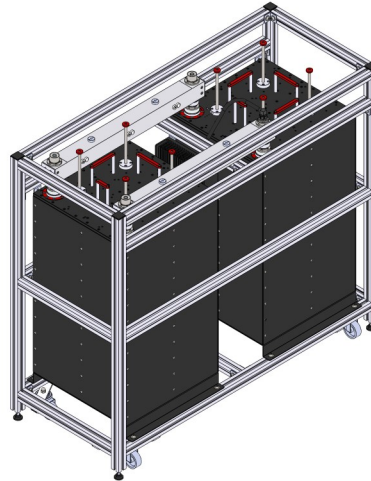
DF4E280RF

FEATURES

- Cross Coupling
- Full-Band Tunability
- 0.4 MHz Minimum Frequency Spacing
- Temperature Stabilization
- DC-Short
- Modular Connector System
- Modular Frame System
- 10-Year Warranty

OPTIONS

- Heat Sinks



SPECIFICATIONS

Code / Revision	B-DF4E280RF/n / B <i>n: Number of Filtered Inputs</i>		
No. of Poles / Cavity Size	4-Pole / 280 mm		
Frequency Range	87.5-108 MHz		
Frequency Spacing	≥ 0.4 MHz		
Temperature Stability	< 400 Hz/K		
Max Operating Temperature (Body)	65°C (149°F)		
Environmental Conditions	-5 to +55°C (+23 to +131°F), IP60		
Dimensions / Weight ⁽¹⁾	n=1: 1586x660x1400 mm / 162 kg n≥2: 1586x(668·n)x1400 mm / 162·n kg		
Operating Position	As shown in drawing only		
Links	1+5/8" Rigid Line		
Connectors (NB Inputs) ⁽²⁾	1x 64 mm D-PC64J 1+5/8" FastLine Socket (Default) D-PC64K 1+5/8" FastLine Flange D-PC64M 3+1/8" FastLine Socket D-PC64N 3+1/8" FastLine Flange		
Connectors (WB Input; Output) ⁽²⁾	2x 64 mm D-PC64J 1+5/8" FastLine Socket (Default) D-PC64K 1+5/8" FastLine Flange D-PC64M 3+1/8" FastLine Socket D-PC64N 3+1/8" FastLine Flange		
Options ⁽²⁾	O-HCS.12 Heat Sinks O-MTS.01 70 °C (158 °F) N.C. Thermoswitch		
TUNING	1.2	0.9	0.6
Minimum Frequency Spacing	0.8 MHz	0.6 MHz	0.4 MHz
Tuning Code	T-4F.10	T-4F.12	T-4F.14
Max RMS NB Input Power ⁽³⁾	(108 MHz) Default 7.9 kW Heat Sinks 9.5 kW	(108 MHz) Default 6.1 kW Heat Sinks 7.3 kW	(108 MHz) Default 4.2 kW Heat Sinks 5.1 kW
Max RMS Output Power ⁽³⁾	18.0 kW	18.0 kW	18.0 kW
NB Insertion Loss	(87.5 MHz) (108 MHz) C.F. < 0.38 dB < 0.42 dB ±150 kHz < 0.41 dB < 0.44 dB + 0.05·n dB	(87.5 MHz) (108 MHz) C.F. < 0.50 dB < 0.55 dB ±150 kHz < 0.54 dB < 0.59 dB + 0.05·n dB	(87.5 MHz) (108 MHz) C.F. < 0.75 dB < 0.82 dB ±150 kHz < 1.82 dB < 0.90 dB + 0.05·n dB
WB Insertion Loss	< 0.06·n dB	< 0.06·n dB	< 0.06·n dB
Selectivity	C.F. ± 1.2 MHz > 25 dB	C.F. ± 0.9 MHz > 25 dB	C.F. ± 0.6 MHz > 25 dB
Harmonic Attenuation ⁽⁶⁾	> 40 dB up to 324 MHz	> 40 dB up to 324 MHz	> 40 dB up to 324 MHz
NB Return Loss (VSWR)	> 26 dB (1.11)	> 26 dB (1.11)	> 26 dB (1.11)
WB Return Loss (VSWR)	Single Ch. > 30 dB (1.07) All band > 24 dB (1.14)	Single Ch. > 30 dB (1.07) All band > 24 dB (1.14)	Single Ch. > 30 dB (1.07) All band > 24 dB (1.14)
Isolation Between Inputs	> 35 dB	> 35 dB	> 35 dB
Group Delay Variation	< 150 ns	< 300 ns	< 1600 ns

⁽¹⁾ Approximate, default configuration ⁽²⁾ Other Other Connectors, Options, Tunings available ⁽³⁾ Altitude < 1500 m (4.900 ft.), Free air, Ambient temp. < 30 °C (86 °F)

⁽⁶⁾ Up to 3rd harmonic atten. with LP/LC Series Lowpass Filter