

Bandpass Reject Duplexer

138 - 174 MHz



DB4060 & DB4062

Duplexers

Designed for duplex systems that operate with close frequency spacing. These duplexers consist of 8" (203.2 mm) diameter quarter-wave coaxial cavities. They are interconnected in a bandpass-band reject configuration using double shielded coaxial cable.

- **Noise Suppression** — 80 or 100 dB Tx noise at the Rx frequency and 80 or 100 dB Rx isolation at the Tx frequency.
- **Four Cavities** — DB4060 uses two cavities for transmit and two for receive and operates at separations of 0.5 MHz or more.
- **Six Cavities** — DB4062, with three cavities for transmit and three for receive, operates at separations of 0.3 MHz or more.
- **Bonus Application** — When frequencies are separated by 0.5 or 0.3 MHz or more, either duplexer can couple two Tx, two Rx or two simplex stations into a common antenna.
- **Frequency Stable** — An Invar rod, with nearly zero expansion, assures frequency stability over a wide range of temperatures.
- **Mounting** — Cabinet mount is standard.

DB4060-WOC
Bandpass Reject
Duplexer



ORDERING INFORMATION

Frequency - MHz	Four Cavity	Six Cavity
138-144	DB4060-WC-A	DB4062-WC-A
143-156	DB4060-WC-B	DB4062-WC-B
154-174	DB4060-WC-C	DB4062-WC-C

For no cabinet, change WC to WOC.

ELECTRICAL DATA

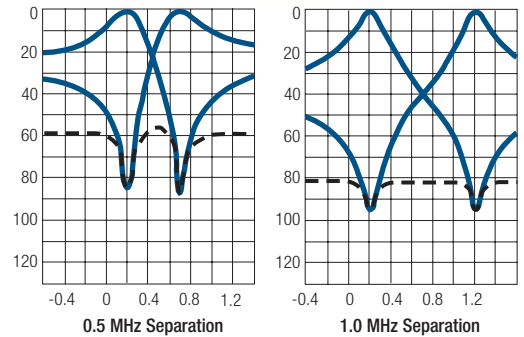
	DB4060	DB4062
Frequency Range - MHz	138-174	138-174
Frequency Separation - MHz	0.5 or more	0.3 or more
Maximum Power Input (continuous duty) - Watts	200	200
Insertion Loss (transmitter to antenna and receiver to antenna) - dB		
at 0.3 MHz Separation	—	2.2
at 0.5 MHz Separation	1.5	—
Transmitter Noise Suppression (at Receiver Frequency) - dB	80	100
Receiver Isolation (at Transmit Frequency) - dB	80	100
Maximum VSWR (referenced to 50 Ohms)	1.5 to 1	1.5 to 1
Temperature Range - C°	-30 to +60	-30 to +60
Number of Cavity Filters	4	6

MECHANICAL DATA

	DB4060	DB4062
Cabinet Dimensions - in. (mm)		
Height	34.5 (876.3)	34.5 (876.3)
Width	20.125 (511.18)	29 (736.6)
Depth	19.25 (488.95)	19.25 (488.95)
Connector Terminations	N-Female	N-Female
Finish	Decibel Tek Black™	Decibel Tek Black™
Net Weight - lbs. (kg)	105 (47.63)	130 (58.97)
Shipping Weight - lbs. (kg)	130 (58.97)	160 (72.57)

Attenuation (dB) vs. Frequency (MHz)

DB4060 4-Cavity Duplexer



DB4062 6-Cavity Duplexer

