

**DB4059 (138-174 MHz)****4 Cavity Bandpass Reject Duplexer**

MODEL	DB4059	DB4059-A
<b>ELECTRICAL SPECIFICATIONS</b>		
Frequency Range, MHz	148-174	138-150
Frequency Separation (min), kHz	750	750
Number of Cavities	4	4
Isolation, dB	70	70
Transmitter Loss, dB	1.2	1.4
Receiver Loss, dB	1.2	1.4
Return Loss, dB	14	14
Impedance, Ohms	50	50
Power Rating, Watts	150	150
<b>MECHANICAL SPECIFICATIONS</b>		
Construction/Finish	Copper/Black	Copper/Black
Input Connector	N(F)	N(F)
Mounting	EIA 19-inch Rack	EIA 19-inch Rack
Temperature Range, degrees	-30 to +60 C	-30 to +60 C
<b>DIMENSIONS</b>		
Cavity Size, in(mm)	4 (102)	4 (102)
Width, in(mm)	19 (483)	19 (483)
Height, in(mm)	5.25 (133)	5.25 (133)
Height, RU	3	3
Depth, in(mm)	19 (483)	19 (483)
Net Weight, lb(kg)	28 (12.7)	28 (12.7)
Shipping Weight, lb(kg)	38 (17.2)	38 (17.2)

**FEATURES AND BENEFITS**

- High quality, tunable capacitor in each cavity generates the reject frequency.
- An Invar rod, with nearly zero expansion, assures frequency stability over a wide temperature range.
- Factory tuned; retunable with appropriate measuring equipment.
- Can be horizontal or vertical on a flat surface or mounted in a standard EIA 19-inch racks

This duplexer uses copper quarterwave coaxial resonators that are interconnected in a bandpass-band reject configuration with double shielded Teflon dielectric cable. They isolate the receive from the transmitter and reduce transmitter sideband noise.

**SELECTIVITY CURVE**