

# DB4368 Series (350-512 MHz)

## Cavity Transmitter Combiner, 2 to 10 Channels

### ELECTRICAL SPECIFICATIONS

|                               |                                      |
|-------------------------------|--------------------------------------|
| Frequency Range, MHz          | See Ordering Information             |
| Frequency Separation, kHz     | 100 min (50 with optional load kit*) |
| Number of Channels            | 2 to 10                              |
| Isolation, dB                 |                                      |
| TX to TX                      | 65 min / 70 typ                      |
| ANT to TX                     | 50 min / 55 typ                      |
| TXSBN at 5 MHz Separation, dB | 35                                   |
| Insertion Loss                | See Insertion Loss chart             |
| Transmitter Return Loss (dB)  | 19 min                               |
| Power/Channel, Watts          | 150                                  |

### MECHANICAL SPECIFICATIONS

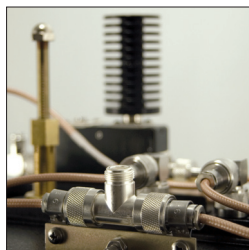
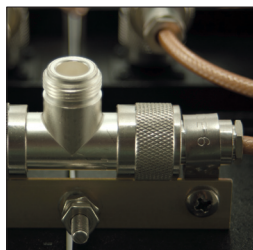
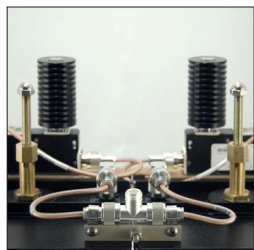
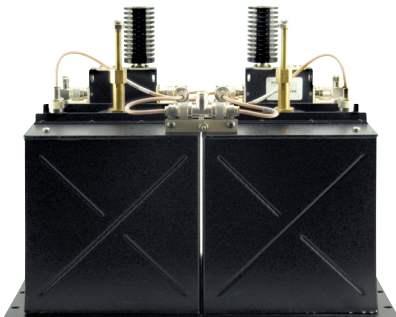
|                            |                  |
|----------------------------|------------------|
| Construction/Finish        | Copper/Black     |
| Input Connector            | N(F)             |
| Mounting                   | EIA 19-inch Rack |
| Temperature Range, degrees | -30 to +60 C     |

### DIMENSIONS

|                             |                                     |
|-----------------------------|-------------------------------------|
| Cavity Size (WxHxD), in(mm) | 9.25 x 8.5 x 9.25 (235 x 215 x 235) |
| Width, in(mm)               | 19 (482.6)                          |
| Depth, in(mm)               | 15 (381)                            |

| Number of Channels | Height in(mm) | RU | Net Weight lb(kg) | Shipping Weight lb(kg) |
|--------------------|---------------|----|-------------------|------------------------|
| 2                  | 10.5 (266.7)  | 6  | 38 (17.3)         | 48 (21.8)              |
| 3                  | 21 (533.4)    | 12 | 57 (25.9)         | 67 (30.5)              |
| 4                  | 21 (533.4)    | 12 | 76 (34.5)         | 86 (39.1)              |
| 5                  | 31.5 (787.4)  | 18 | 95 (43.2)         | 105 (47.7)             |
| 6                  | 31.5 (787.4)  | 18 | 114 (51.8)        | 124 (56.4)             |
| 7                  | 42 (1066.8)   | 24 | 133 (60.5)        | 143 (65)               |
| 8                  | 42 (1066.8)   | 24 | 152 (69.1)        | 162 (73.6)             |
| 9                  | 52.5 (1333.5) | 30 | 171 (77.7)        | 181 (82.3)             |
| 10                 | 52.5 (1333.5) | 30 | 190 (86.4)        | 200 (90.9)             |

\* On frequency separations less than 75 kHz (50 kHz min), use a load kit. Available kits are DB434801LDKT, DB434802LDKT, and DB434803LDKT with 1, 2, and 3 loads respectively.



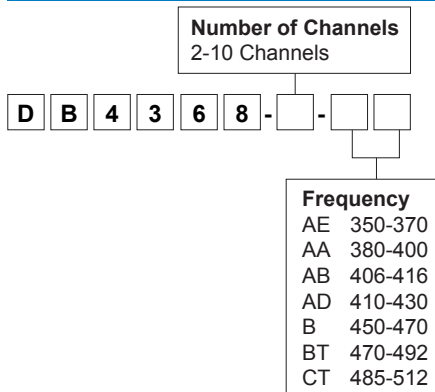
### FEATURES AND BENEFITS

- Low insertion loss.
- Solid copper cavities.
- Compact packaging.
- Dual junction isolators.
- Easy field tuning and expansion.
- 100 kHz TX to TX minimum spacing standard or 50 kHz with optional high power load kits.

### INSERTION LOSS, typ (dB)

| Number of Channels | Frequency Separation, kHz |         |         |         |         |                |
|--------------------|---------------------------|---------|---------|---------|---------|----------------|
|                    | 50-100                    | 100-150 | 150-200 | 200-300 | 300-400 | 400 or greater |
| 2                  | 7.7                       | 4.7     | 3.4     | 2.7     | 2.3     | 2.3            |
| 3                  | 7.9                       | 4.9     | 3.6     | 2.9     | 2.4     | 2.3            |
| 4                  | 8.1                       | 5.1     | 3.8     | 3.1     | 2.6     | 2.3            |
| 5                  | 8.3                       | 5.3     | 4.0     | 3.3     | 2.8     | 2.5            |
| 6                  | 8.5                       | 5.5     | 4.2     | 3.5     | 3.0     | 2.7            |
| 7                  | 8.7                       | 5.7     | 4.4     | 3.7     | 3.2     | 2.9            |
| 8                  | 8.9                       | 5.9     | 4.6     | 3.9     | 3.4     | 3.1            |
| 9                  | 9.2                       | 6.2     | 4.9     | 4.2     | 3.7     | 3.4            |
| 10                 | 9.6                       | 6.6     | 5.3     | 4.6     | 4.1     | 3.8            |

### ORDERING INFORMATION



### ACCESSORIES

- |              |                                   |
|--------------|-----------------------------------|
| DB4368DIN    | 7/16 DIN output connector         |
| DB4368-WB*   | Expansion channel with bracket    |
| DB4368-WOB*  | Expansion channel without bracket |
| DB4368LDKT** | 100 Watt Load upgrade kit         |

\*When ordering expansion channels, please specify the number of channels desired. For multiple expansion channels please contact dbSpectra Technical Support.

\*\*If channel spacing is less than 100 Hz and equal to or greater than 50 kHz, high power load kits (DB4368LDKT) to each closely spaced channel (2 minimum). Adds 4.6" to depth but nothing to height.

### CAVITY SELECTIVITY CURVE

