

# FILTERS

## BPBR 4/66-HX-150

12-cavity Mobile or Base Station Pass-reject Filter for the 68-108 MHz band



### DESCRIPTION:

- ★ This type of filter uses 12 large 40 x 40 mm cavities all with 3.5 mm silverplated helical resonators, diameter 19 mm.
- ★ Using these large helicals and cavities means higher Q-value and possibility of using very small spacing between pass and reject.
- ★ Using large helicals and cavities also means higher power handling - up to 70 W with 1.5 dB insertion loss and 100 W with 1 dB insertion loss.
- ★ BPBR 4/66-HX-150 is divided into two sub-bands: Pass 68-78 MHz or Pass 78-86.375 MHz. The reject is in both cases 87.6-108 MHz. Other tuning ranges on demand.
- ★ The cavities are made of extruded aluminium, the chassis of passivated steel. All coaxial cables are the semirigid-type and teflon is used in connectors and cables.
- ★ The filter is coated with black vinyl to prevent corrosion.
- ★ Please specify pass and reject frequencies when ordering.



### SPECIFICATIONS:

| ELECTRICAL                           |   |
|--------------------------------------|---|
| MODEL                                | BPBR 4/66-HX-150  |
| TX/RX FREQUENCY RANGE                | 68-108 MHz  |
| MAX. INPUT POWER                     | 100 watts @ 1 dB insertion loss   |
| MIN. SPACING BETWEEN PASS AND REJECT | 800 kHz @ 2.4 dB insertion loss<br>2 MHz @ 1.6 dB insertion loss                    |
| TYPICAL INSERTION LOSS               | @ 800 kHz spacing: 2.4 dB<br>@ 1.5 MHz spacing: 2.0 dB<br>@ 2.0 MHz spacing: 1.6 dB |
| REJECTION                            | @ 800 kHz spacing: min. 60 dB<br>rest of 87.5 - 108 MHz: min. 55 dB                 |
| IMPEDANCE                            | Nom. 50 Ω   |
| SWR                                  | ≤ 1.5   |
| MECHANICAL                           |   |
| TEMP. RANGE                          | -30° C → +60° C   |
| FREQUENCY STABILITY                  | Approx. 8 ppm/° C   |
| CONNECTORS                           | N-female  |
| DIMENSIONS (L x W x H)               | 200 x 250 x 95 mm   |
| WEIGHT                               | Approx. 2.3 kg  |

### TYPICAL RESPONSE CURVES:

