## MODEL WP-687-3943 DIPLEXER FOR THE 900-960 MHz BAND

Model WP-687-3943 is a special 4-cavity Bandpass-Reject Diplexer designed to couple two separate receivers (operating at 901 and 940 MHz respectively) into a single antenna. It consists of one 4" OD Bandpass and one Bandpass-Reject cavity in each section, all mounted on a  $5\frac{1}{4}$ " x 19" steel panel. The panel includes a special stiffener bracket to dampen vibration. The Bandpass-Reject cavity in each section is tuned to reject the 929 to 932 MHz band. The two cavities in each section of this diplexer are essentially the same as model WP-4941-7941 dual filter described in the catalog.

|   | WP-687-3943                     |
|---|---------------------------------|
| Tuning Range                                  | 900-960 MHz                     |
| Insertion Loss (F1 to F2 to Antenna)          | 1.2 dB                          |
| Isolation, F1 and F2, min                     | 40 dB                           |
| Attenuation of 929-932 MHz Band F1 to Antenna | 70 dB<br>45 dB                  |
| Temperature Range                             | -30° to +60°C                   |
| Maximum VSWR (Ref. 50 ohms)                   | 1.3 to 1                        |
| Number of Cavity Filters                      | 4                               |
| Materials:                                    |                                 |
| Cavity Outer Conductor                        | Copper<br>Copper<br>Copper      |
| Dimensions:  Cavity (not incl.tuning rod)     | 4" dia. x 6"<br>5¼" x 10" x 19" |
| Connector Terminations                        | Type N Female                   |
| Shipping Weight                               | 23 lbs.                         |

